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NAS FORT WORTH
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PETROLEUM STORAGE TANK REMOVAL AND INITIAL SITE ASSESSMENT BX SERVICE STATION BUILDING 1518 NAS FORT WORTH TX
7/26/1993
WC ENVIRONMENTAL GROUP

File: 17G
A.F.

159 00

NAVAL AIR STATION FORT WORTH JRB CARSWELL FIELD TEXAS

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 159

File: 17A-37
D.B. 154

ENVIRONMENTAL GROUP
A Division of Perry Williams, Inc.

PETROLEUM STORAGE TANK REMOVAL & INITIAL SITE ASSES[illegible]

159 01

Selected [illegible]
Carswell Air Force Base
Fort Worth [illegible]

BX [illegible]
Aircraft [illegible]

[illegible]

U.S. Army [illegible]

Mr. Mark Simmons [illegible]
Fort Worth District [illegible]

[illegible]

P.O. Box 30[illegible] Texas 79[illegible]

ENVIRONMENTAL GROUP*
* A Division of Perry Williams, Inc.

159 02

Office (806) 373-5820
Toll Free 1-800-445-1249
FAX (806) 371-0340

PETROLEUM STORAGE TANK REMOVAL & INITIAL SITE ASSESSMENT

BX Service Station
Building #1518

TWC Facility #0009696
LPST #104524
Owner ID #04532

Zone #3
Contract #DACA63-92-D-0046
Delivery Order #0002

Prepared for:
U.S. Army Corps of Engineers

Mr. Mark Simmons
Fort Worth District

Mr. Todd Smith
Fort Worth, Texas

Prepared by:
Larry Cunyus
WC Environmental Group

July 26, 1993

P.O. Box 30206 • Amarillo, Texas 79120

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REPORT SUMMARY

This report covers Perry Williams, Inc. (PWI) operations in May 1993, at Carswell Air Force Base, Fort Worth, Texas. This work was performed under U.S. Army Corps of Engineers Contract #DACA63-92-D-0046, Delivery Order #0002. The Texas Water Commission (TWC) Owner I.D. for this site is #04532 and the TWC Facility I.D. is #0009696. The TWC assigned LPST #104524 to this site. Mr. Todd Smith was the assigned Project Engineer for the U.S. Army Corps of Engineers (Corps).

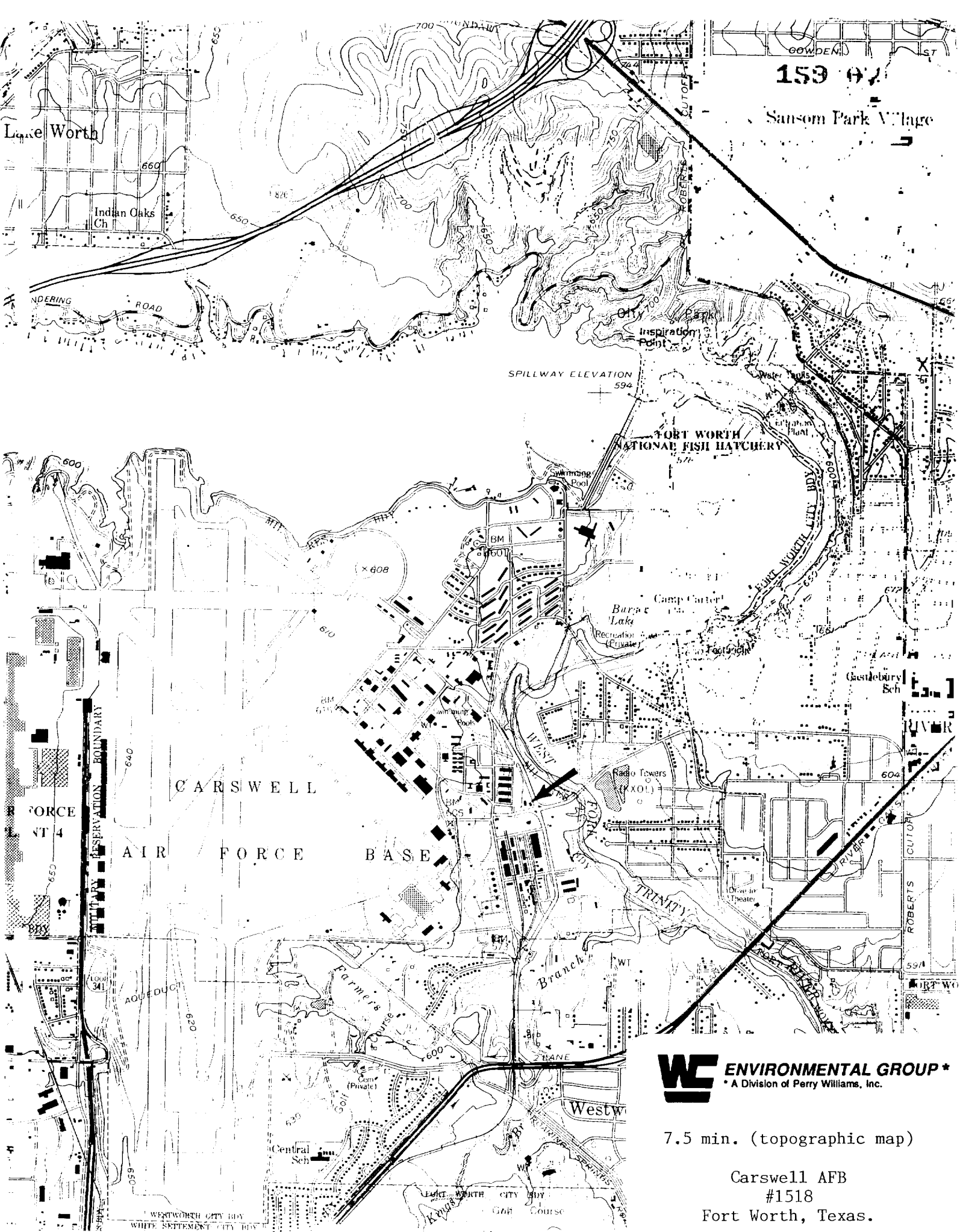
The scope of work for this Delivery Order consisted of removal of four (4) 10,000 gallon underground storage tanks (UST's), removal of associated piping adjacent to the tanks, and the disposal in-place of the remaining piping associated with the UST's. Backfilling, site restoration, testing, and reports at the BX Service Station, Building #1518 were also required under the aforementioned contract.

The purpose of this work was to remove four tanks as quickly as possible. The intent was not to achieve a "clean closure", but rather to remove the sources that were a possible source of petroleum releases into the nearby Trinity River. Mr. Todd Smith, Project Engineer, directed that the backfilling of the tankhold be accomplished by placing exhumed tankhold stockpile soils back into the excavation. A 20 mil liner was placed on top of the backfill and the excavation was topped off with topsoil. Mr. Tom Knode, TWC representative, approved the aforementioned (Corps) directive.

All UST's were removed by May 12, 1993. All appropriate in-situ, exhumed stockpile, and groundwater samples were collected, shipped and analyzed by Chemron Labs in San Antonio, Texas. As per contract requirements, soils were analyzed for Total Recoverable Petroleum Hydrocarbons (TRPH), Benzene, Toluene, Ethylbenzene, Xylene (TBTEX) and Total Lead.

CHRONOLOGY OF EVENTS

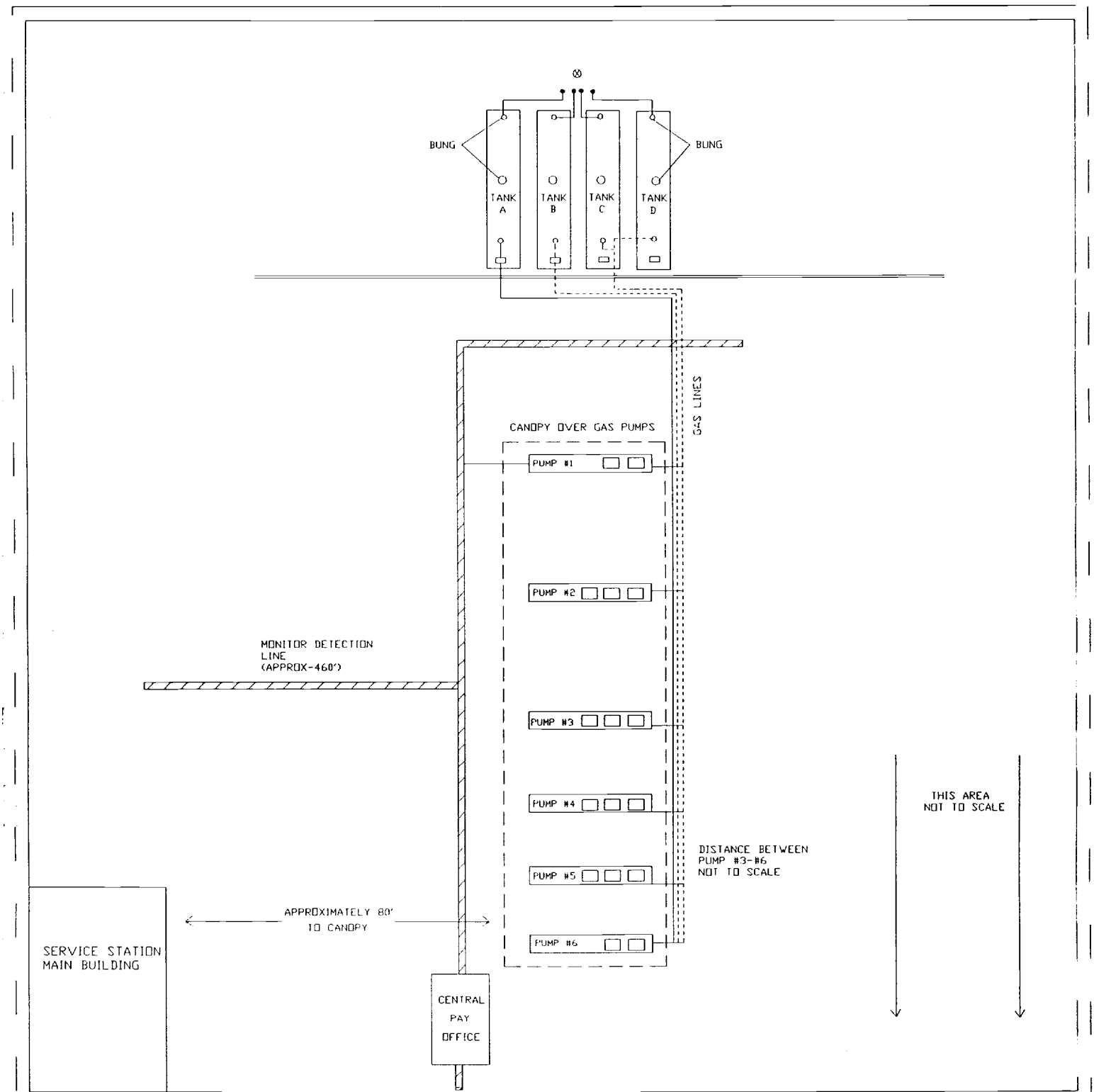
1972 - 1973	Four (4) 10,000 gallon fiberglass tanks were installed at BX Service Station, Buidling #1518.
04-30-93	PWI issued construction notification to TWC office, Duncanville, Texas.
05-10-93	PWI personnel mobilize to job site.
05-11-93	PWI personnel began to exhume Tank D (east tank). Tank D floated due to groundwater at approximately 6'. Tank D was pulled to prevent tank from rolling and spilling any tank residue.
05-12-93	Tanks A, B, & C were removed. Appropriate in-situ, stockpile and groundwater samples were collected and shipped to Chemron Laboratories in San Antonio, Texas. Texas Water Commission (TWC) representative, Mr. Tom Knode was on-site for tank removal and issued directive (see Appendix H).
05-13-93	Mobley Company arrived on site and removed 100 gallons of fluid from the four tanks. All four tanks were purged with dry ice and appropriate readings for Lower Explosion Limit (LEL), and Oxygen were taken. S & H Tank Company transported all four tanks off-site and issued certificate's of destruction. PWI personnel placed exhumed stockpile material into tankhold.
05-14-93	A 20 mil liner (35' x 40') was placed in tankhold before implacement of imported backfill material.
05-15-93	Holder Trucking delivered 216 cubic yards of imported backfill material.
05-18-93	Holder Trucking removed 24 cubic yards of concrete generated by tank top removal.
05-20-93	Holder Trucking delivered 36 cubic yards of topsoil
05-21-93	PWI personnel dug trench for 50 feet of new curb and gutter. Tankhold area was topped off with topsoil in preparation for turfing operation. Corps gave PWI verbal acceptance of work performed at Site #1518.
05-22-93	Topsoil was raked over tankhold area and grass planted. New curb and gutter was poured and finished.



ENVIRONMENTAL GROUP *
* A Division of Perry Williams, Inc.

7.5 min. (topographic map)

Carswell AFB
#1518
Fort Worth, Texas.



PROJECT NAME:
SITE 1518
BASE SERVICE STATION
CARSWELL, AFB, TEXAS

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SITE MAP

PO #DACA63-92-D-0046

- VENT
- SUBMERSIBLE PUMP
- DISPENSER LOCATION
- WATER WELL

0 30

WC ENVIRONMENTAL GROUP
P. O. BOX 30206
AMARILLO, TEXAS 79120

SAMPLE TESTING RESULTS/ SOIL AND WATER

Contract No.: DACA63-92-D-0046 Site: Carswell AFB #1518 Fort Worth Tx. Zone: 2

Delivery Order No.: 0002 Sampler: Larry Cunyus

Date	Lab ID#	Field Description	Matrix	TRPH	BTEX	Lead
5-12-93	27343	CAFB-1518-EXW	Water	14. ppm	25.37 ppm	< .1 ppm

SAMPLE TESTING RESULTS/ SOIL AND WATER

Contract No.: DACA63-92-D-0046 Site: Carswell AFB #1518 Fort Worth Tx. Zone: 2

Delivery Order No.: 0002 Sampler: Larry Cunyus

Date	Lab ID#	Field Description	Matrix	TOX	TDS	pH
5-12-93	27343	CAFB-1518-EXW	Water	1.3 mg/kg	780. mg/l	6.7

SAMPLE TESTING RESULTS/ SOIL AND WATER

Contract No.: DACA63-92-D-0046 Site: Carswell AFB #1518 Fort Worth Tx. Zone: 2

Delivery Order No.: 0002 Sampler: Larry Cunyus

Date	Lab ID#	Field Description	Matrix	TRPH	BTEX	Lead
5-12-93	27345	CAFB-1518-A-NW	Soil	< 10. ppm	<2.4 ppm	10. ppm
5-12-93	27346	CAFB-1518-A-NWW	Soil	< 10. ppm	<2.4 ppm	10. ppm
5-12-93	27347	CAFB-1518-A-SWW	Soil	< 10. ppm	<2.4 ppm	11. ppm
5-12-93	27348	CAFB-1518-A-SW	Soil	64. ppm	<2.4 ppm	< 5.0 ppm
5-12-93	27349	CAFB-1518-B-NW	Soil	66. ppm	112. ppm	5.2 ppm
5-12-93	27350	CAFB-1518-B-SW	Soil	200. ppm	19.5 ppm	15. ppm
5-12-93	27351	CAFB-1518-C-NW	Soil	44. ppm	363.1 ppm	< 5.1 ppm
5-12-93	27352	CAFB-1518-C-SW	Soil	63. ppm	64.0 ppm	< 5.3 ppm
5-12-93	27353	CAFB-1518-D-NW	Soil	28. ppm	1.5 ppm	< 5.1 ppm
5-12-93	27354	CAFB-1518-D-NEW	Soil	19. ppm	411.4 ppm	< 5.1 ppm
5-12-93	27355	CAFB-1518-D-SEW	Soil	630. ppm	1119. ppm	< 5.5 ppm
5-12-93	27356	CAFB-1518-D-SW	Soil	< 10. ppm	<2.4 ppm	< 5.5 ppm
5-12-93	27361	CAFB-1518-A-SW2	Soil	< 10. ppm	3.5 ppm	5.5 ppm

QUALITY CONTROL TESTING RESULTS/ SOIL AND WATER

Contract No.: DACA63-92-D-0046 Site: Carswell AFB #1518 Fort Worth Tx. Zone: 2

Delivery Order No.: 0002 Sampler: Larry Cunyus

Date	Lab ID#	Field Description	Matrix	TRPH	BTEX	Lead
5-12-93	27342	Travel Blank	Water	N/A	< .03 ppm	N/A
5-12-93	27344	CAFB-1518-D-NW/RB	Water	< .5 ppm	<0.02 ppm	< .1 ppm
5-12-93	27360	CAFB-1518-B-NW/QC	Soil	41. ppm	99.2 ppm	5.5 ppm

SAMPLE TESTING RESULTS/ SOIL AND WATER

Contract No.: DACA63-92-D-0046 Site: Carswell AFB #1518 Fort Worth Tx. Zone: 2

Delivery Order No.: 0002 Sampler: Larry Cunyus

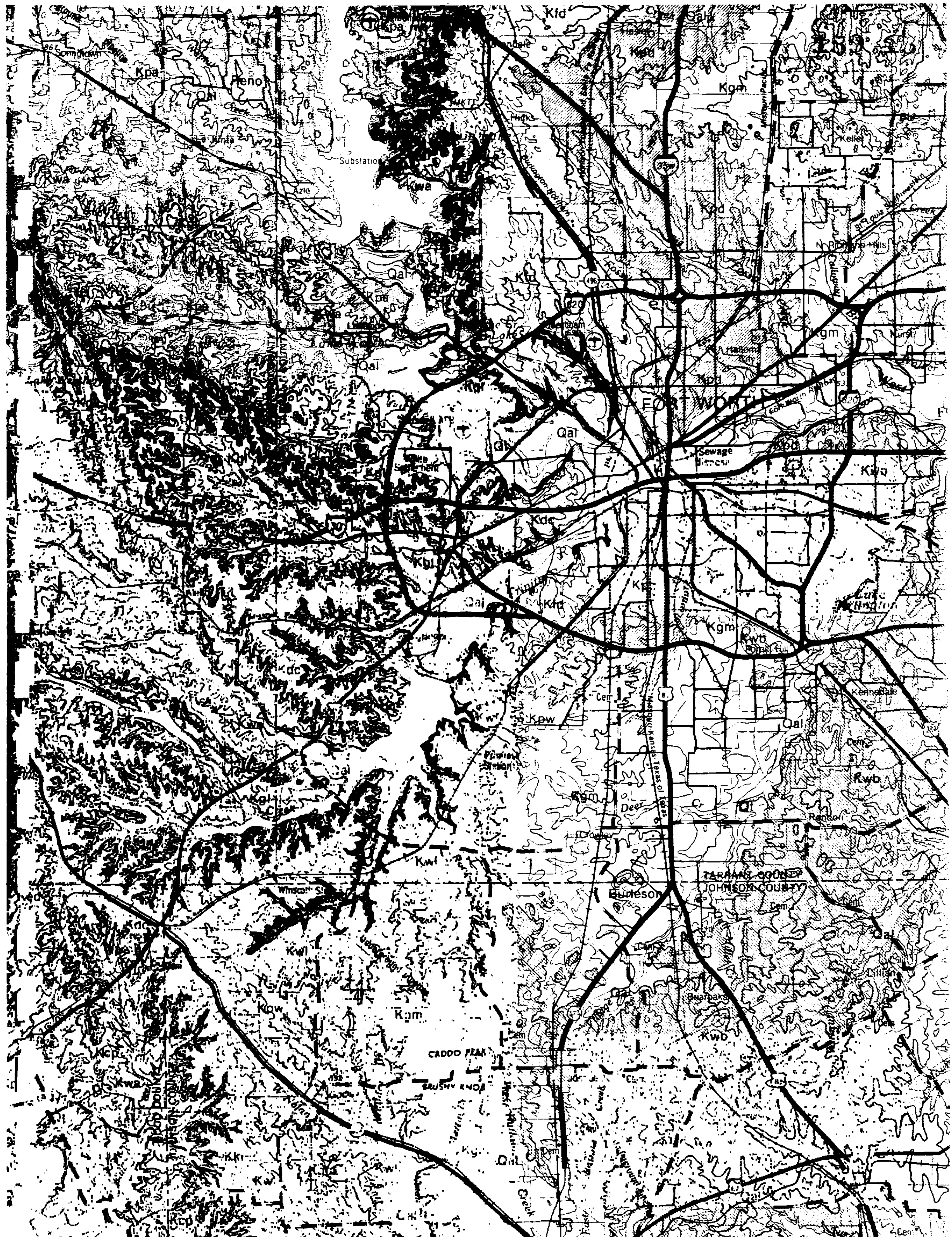
Date	Lab ID#	Field Description	Matrix	TRPH	BTEX	Lead
5-12-93	27357	CAFB-1518-SPA	Soil	47. ppm	34.6 ppm	11. ppm
5-12-93	27358	CAFB-1518-SPB	Soil	18. ppm	18.0 ppm	5.1 ppm
5-12-93	27359	CAFB-1518-SPC	Soil	31. ppm	16. ppm	5.0 ppm

REGIONAL GEOLOGY AND HYDROGEOLOGY

The city of Fort Worth, Texas is centrally located in Tarrant County, a county of the north central part of the State. Tarrant County is situated on the eastern shelf of the Fort Worth basin, west of the Ouachita Fold Belt. The oldest stratigraphic units within the county are found exposed in the northwest corner with progressively younger strata to the southeast, toward the Gulf of Mexico.[1] The rock units are representative of the late Cretaceous Age (see enclosed geologic map) and are composed of sandstone, marl, shale and fossilferous limestones.

During the late Cretaceous, deeper marine seas covered north central Texas, than had been present during the early Cretaceous. Large deposits of marine sediment created massive units of limestone and shale, which can be seen cropping out in this part of the State. These formations have largely determined the type of soil exposed at the surface and have influenced the kind and quality of the underlying aquifers.

The primary aquifers for Tarrant County are part of the important Trinity Group, the principal water-bearing group of rocks in the region. The group is divided into three main units, the Paluxy, Glen Rose and the Travis Peak.[2] The Paluxy, the youngest water-bearing formation, crops out in the northwestern part of Tarrant County. It is generally, a sandstone, a secondary aquifer, and capable of furnishing water to households, small cities and various industries. Below the Paluxy lies the Glen Rose formation. It is generally a poorer reservoir, because of its calcareous nature. The next older unit, the Travis Peak is the primary aquifer for the region. It is generally composed of cretaceous-age deposits of sand and gravel with interbedded clay. Water from the Travis Peak is a very good quality and can be produced in sufficient quantities to supply large agricultural and urban needs.



Springtown
Reno
Substation
Azle
Keller
FORT WORTH
Sewage Disposal
Kennedale
Crowley
Burleson
TARRANT COUNTY
JOHNSON COUNTY
CADDO PEAK
BRUSHY KNOB
Kfd
Kpa
Kgm
Kwa
Qal
Kdc
Kbl
Kwb
Kpw
Kwl
Kcp

SITE GEOLOGY/HYDROGEOLOGY

The BX Service Station, Site #1518 at Carswell Air Force Base in Fort Worth, Texas is located on the Fort Worth Limestone of the Lower Cretaceous. The site is west of the subsurface Ouachita Fold Belt. No known faults are present in the site area.

Depth to groundwater is 5 to 15 feet in this area of Fort Worth, as demonstrated by existing monitor wells on base. The hydraulic gradient is to the east toward the Trinity River some 800 yards away. Groundwater was encountered, at approximately 6 feet in this tankhold. Total dissolved solids (TDS) of 780 mg/l from a groundwater sample collected in the tankhold would seem to indicate that this water is groundwater.

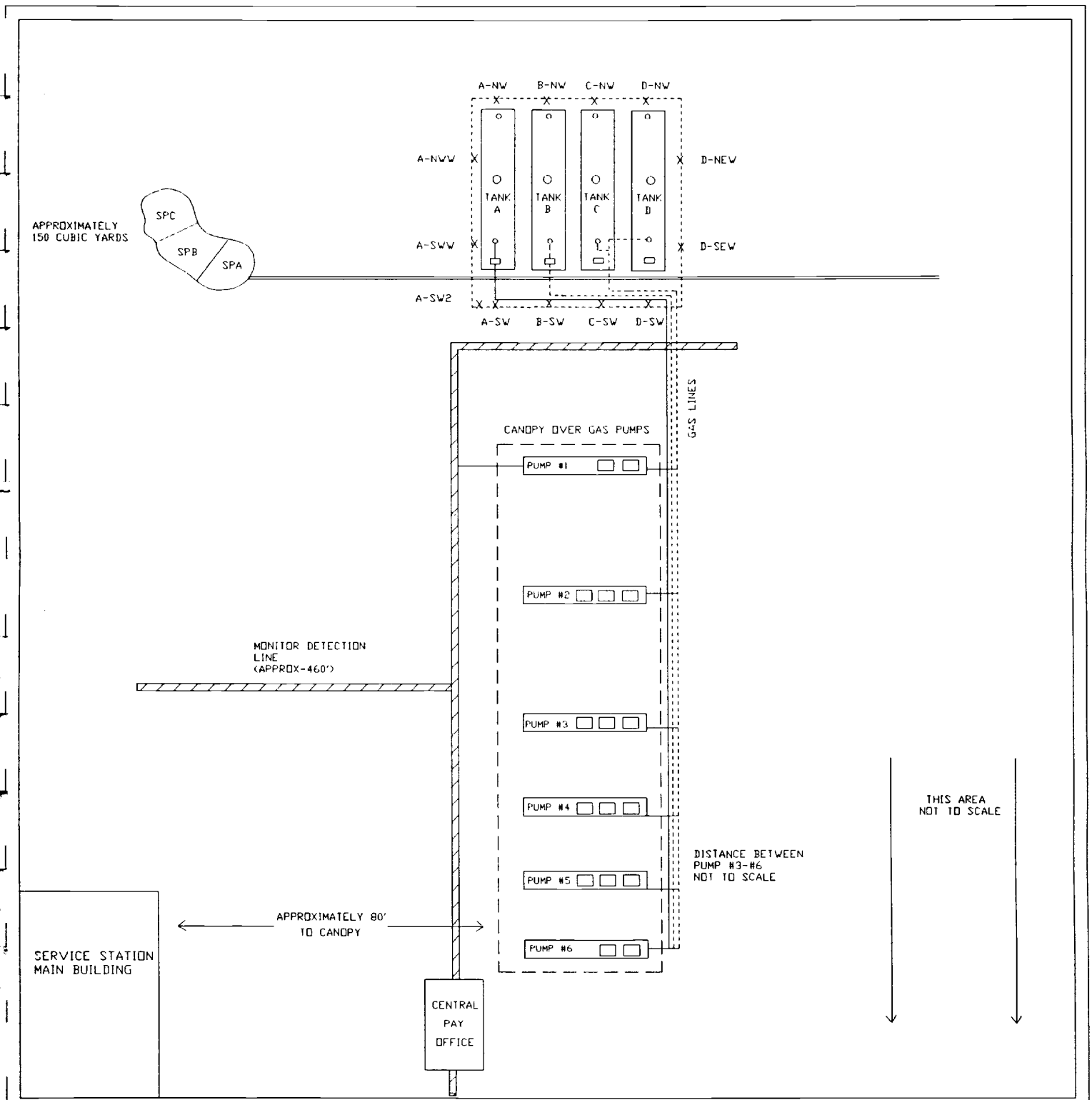
Soil Types

Reference to "Soil Survey of Tarrant County" produced by the United States Department of Agriculture's Soil Conservation Service, indicates the soil present on-site belongs to the Frio Urban association. This association makes up about 25 percent of Tarrant County. Typically, the surface layer of the Frio soil is moderately alkaline, very dark grayish brown silty clay about 15 inches thick. Underlying this horizon from 15 to 24 inches is a moderately alkaline dark grayish brown silty clay. Below this member from 24 to 80 inches is a moderately alkaline brown silty clay loam. The Frio soil is well drained. Permeability is moderately slow and available water capacity is high. The soils in this area are moderately suited to urban uses. The hazard of flooding, low strength affecting streets and roads, and corrosivity to uncoated steel are the main limitations associated with this soil group.

SITE SOIL ASSESSMENT AND REMEDIAL OPERATIONS

UST removal operations revealed some significant contamination present in the tankhold, specifically in the area of Tank D. A map showing the location of each sidewall sample and each stockpile sample and its identifying label is included (see sample location map). Contamination levels of 1100 ppm TBTEX and 630 ppm TRPH (Total Recoverable Petroleum Hydrocarbons) were revealed in soil sample #CAFB-1518-D-SEW. Tank B north wall and south wall samples, Tank C north wall, and Tank D northeast wall samples exhibited readings above the contract "action limits" of 100 ppm for TRPH and 30 ppm for TBTEX (see tabulated sample data).

As stated earlier in this report, the purpose of the removal operation was not to achieve a "clean closure" but to simply remove the tanks and the associated piping in a timely fashion. After the UST's were removed, backfilling was accomplished by placing excavated stockpile soils in the bottom of the tankhold. A 20 mil liner (35' x 40') was then placed over the reemplaced excavated soil. Above the liner, clean imported backfill was used to bring the excavated area back to original grade. No further remedial action was taken.



PROJECT NAME:
SITE 1518
BASE SERVICE STATION
CARSWELL, AFB, TEXAS

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SAMPLE LOCATION MAP

PO #DACA63-92-D-0046

WC ENVIRONMENTAL GROUP
P. O. BOX 30206
AMARILLO, TEXAS 79120

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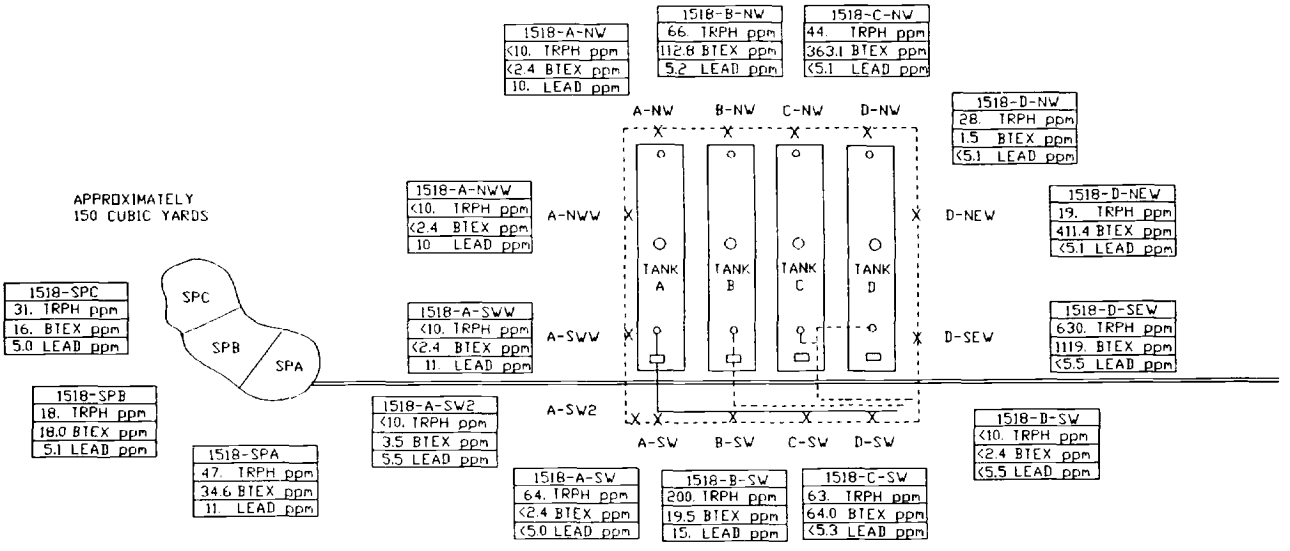

PROJECT NAME:

SITE 1518
BASE SERVICE STATION
CARSWELL, AFB, TEXAS

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SAMPLE RESULT
TANKHOLD MAP

WC ENVIRONMENTAL GROUP
P. O. BOX 30206
AMARILLO, TEXAS 79120

PO #DACA63-92-D-0046

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SAMPLE TESTING RESULTS/ SOIL AND WATER

Contract No.: DACA63-92-D-0046 Site: Carswell AFB #1518 Fort Worth Tx. Zone: 2

Delivery Order No.: 0002 Sampler: Larry Cunyus

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5-12-93	27359	CAFB-1518-SPC	Soil	31. ppm	16. ppm	5.0 ppm

SITE EXCAVATED SOIL ASSESSMENT

Excavated stockpile soil was sampled on a one (1) sample per fifty (50) cubic yard ratio. A total of three (3) stockpile samples were collected, composited, and shipped to Chemron Labs in San Antonio, Texas for lab analysis. Lab analysis indicated all samples were "clean", i.e. below 100 ppm TRPH and 30 ppm TBTEX (see stockpile map) except for sample #CAFB-1518-SPA which showed a concentration of 34.6 ppm TBTEX. Most of the TBTEX were from Xylene concentration levels of 33 ppm. Benzene, Toluene, and Ethylbenzene levels were in minute quantities of .4 ppm, .7 ppm, and .9 ppm respectively. The TBTEX value was 4.6 ppm over the "action limits" and was considered de minimis.

As directed by the Corps, all excavated stockpile soils were placed in the bottom of the tankhold. Analytical data as well as a site map are included in this report.

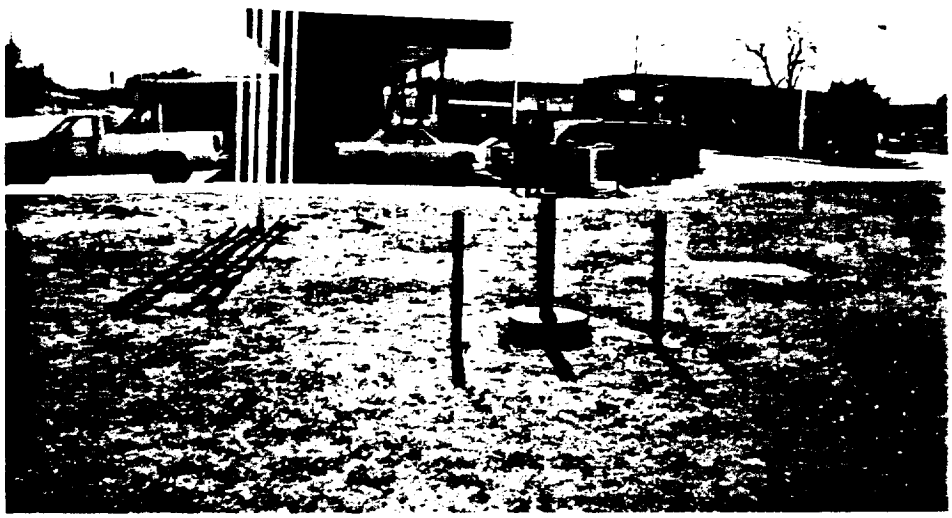
SITE GROUNDWATER/SURFACE WATER ASSESSMENT

Groundwater was encountered within the tankhold during tank excavation. As directed by Mr. Todd Smith, Corps representative, and Mr. Tom Knode, TWC representative, one groundwater sample was collected (see tabulated sample data). Lab analysis of the groundwater sample showed concentrations of 14 ppm for TRPH and less than .1 ppm Total Lead. This groundwater sample has a pH of 6.7. Lab analytical data revealed the quality of this groundwater contained 780 mg/l of Total Dissolved Solids (TDS). Furthermore, analysis showed TBTEX concentrations of 25.37 ppm, indicating groundwater impact by gasoline. As directed by the Corps and TWC, no further action was taken at the site concerning groundwater.

As discussed in the scope of work section on Delivery Order #0002, all four tanks were evacuated by Carswell personnel prior to PWI's arrival. Upon inspection of these tanks, before removal, the tanks were relatively empty. After removal of the tanks, Mobley Company removed 100 gallons of tank residue from the four tanks (see Appendix B).

Photo 1: Condition of site prior to tank removal. Carswell AFB #1518.

Photo 2: Condition of site prior to tank removal. Carswell AFB #1518.



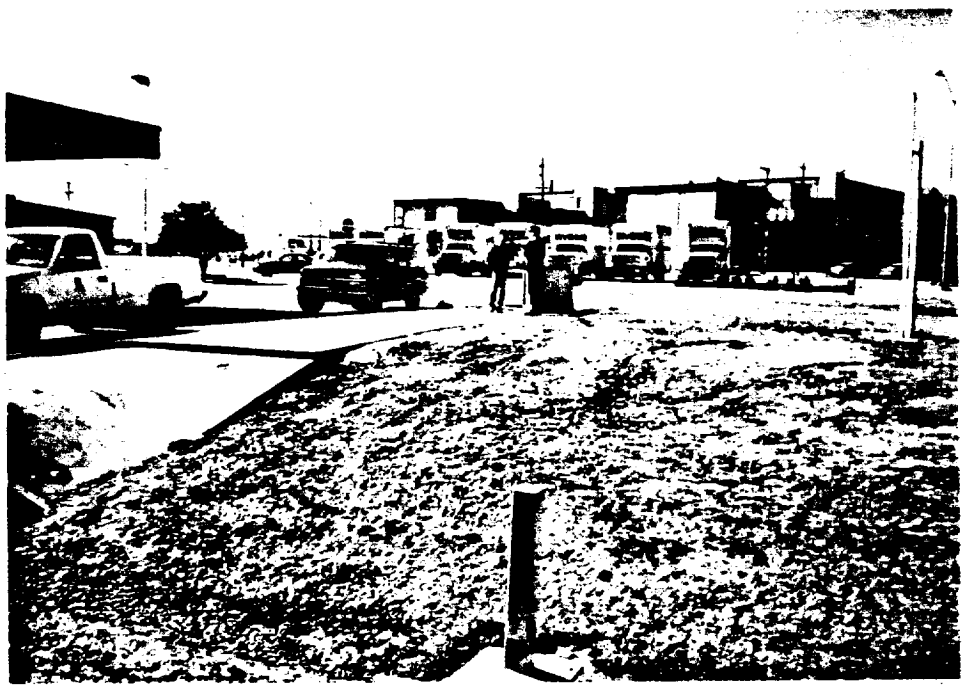


Photo 3: Tank C being pulled.

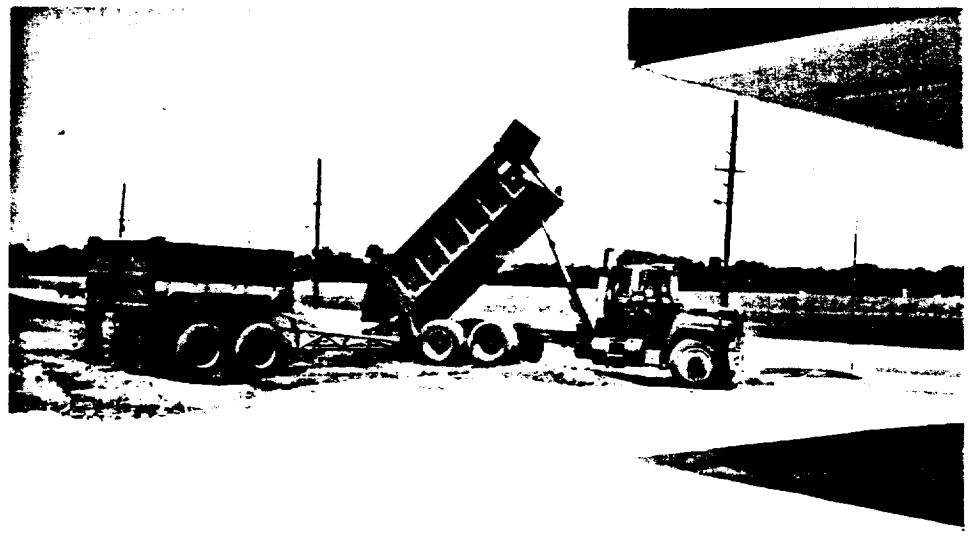
Photo 4: View of groundwater in tankhold D.

Photo 5: Tankhold with liner in place.

Photo 6: Tankhold with liner showing imported backfill being placed in tankhold.

Photo 7: Backfilling tankhold with imported material.

Photo 8: Backfill material near completion.



WASTE MANAGEMENT AND DISPOSITION

A. Tanks: Four (4) UST's were removed from Building #1518. These tanks measured 8' by 30'. Total capacity for these tanks was calculated at 10,000 gallons.

Upon removal, these tanks were purged with dry ice before being transported off-site by S & H Tank Company. PWI was issued certificate's of tank destruction by S & H Tank Company (see Appendix A).

UST associated piping totaling 310 linear feet were capped and abandoned in-place while another 75 linear feet of associated piping was removed.

B. Tank Contents: 100 gallons of tank petroleum fluids were evacuated from the four tanks by Mobley Company (see Appendix B). These fluids are to be recycled through Mobley Company.

REFERENCES

1. United States Department of Agriculture
Soil Conservation Service
Soil Survey of Tarrant County, Texas; 1981

2. Texas Water Commission
Groundwater Quality of Texas; March 1989

APPENDIX A

UST/AST Certificates of Destruction

S & H TANK CO., Inc.

Tank Destroyal's • Dry Ice • Petroleum - Dispersant

P.O. Box 219 • Venus, Texas 76084

Local: (214) 366-8685 1-800-824-6436
Metro: (214) 263-7172 FAX: (214) 366-8684

INVOICE NO.
DATE 5-13-93
P.O. NO.
SOLD BY [signature]
CASH
CHECK NO.
CHARGE NO.

Contractor's Name: Perry Williams, Inc.
Address: P O Box 30206
Amarillo TX 79120
Phone: 1-214-850-7626 806-678-9235 - Jay
Office 806-373-5820

Landowner Name: United States
Address: Air Force
ON-183 - Main Ft Worth TX
Time of Job:

CERTIFICATE OF TANK DESTROYAL

QUANTITY	TANK SIZE	DESCRIPTION	PRICE
4	10,000	Fiberglass	250.00 250.00 250.00 250.00
		TO WHOM IT MAY CONCERN: TANKS TO BE DESTROYED FOR SCRAP	
		SUBTOTAL	
		TAX	
		TOTAL	

AUTHORIZED SIGNATURE
CONTRACTOR
NAME

TERMS: NET 30 DAYS - PAST DUE ACCOUNTS SUBJECT TO 1½% PER MONTH (18% PER ANNUM) SERVICE CHARGE. MINIMUM ORDER $5.00. IN THE EVENT OF SUIT OR LEGAL ACTION TO ENFORCE COLLECTION OF THE ABOVE, S & H TANK CO., INC. IS ENTITLED TO RECOVER REASONABLE ATTORNEY'S FEES

33

159 37

STANDARD FORM 7

TANK CLOSURE MATERIAL DISPOSAL FORM

PROJECT: UNDERGROUND STORAGE TANK REMOVAL DATE 5-13-93

OWNER OR OPERATOR OF DISPOSAL FACILITY:

NAME: S&H TANK, INC.

ADDRESS: P.O. BOX 219

CITY, STATE, ZIP: VENUS, TEXAS 76084

PHONE: (214) 263-7172

NAME OF DISPOSAL FACILITY:

NAME: S&H TANK, INC.

ADDRESS: HWY 157 S.

CITY, STATE, ZIP: VENUS, TEXAS

PHONE: (214) 263-7172

HAULER: SH Tank, Inc.

TYPE OF MATERIAL DISPOSED OF: SOIL _____ LIQUID X

APPROXIMATE VOLUME OF MATERIAL RECEIVED: NONE

TYPE OF CONTAINER: 4 10,000 gal. STEEL Fiberglass

CONTAINERS LABELLED? X YES _____ NO

CERTIFIED TEST RESULTS ATTACHED: N/A

DISPOSAL METHOD USED: SCRAP

I certify that the above statements are true and that the disposal facility has all approvals required for the disposal of hydrocarbon contaminated materials as required by the U. S. Environmental Protection Agency, the Texas Water Commission and the Texas Department of Health.

Vicki Tacker
DISPOSAL FACILITY AUTHORIZED SIGNATURE

AP/R4/0190

SF7-1

CERTIFICATE OF DESTRUCTION
FOR
USED PETROLEUM TANKS

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned S&H TANK, INC.
(NAME OF DISPOSER)
of HWY 157 S. VENUS, TEXAS
(ADDRESS OF DISPOSER)
did on 5-13-93 (DATE) properly dispose of underground storage tank # 4-10,000 F. berg/ASS,
previously located at: OW-183- Main- Caswell
FtWorth TEXAS, in accordance with API recommended guidelines 1604, 2015, 2217 and other regulations as appropriate, by properly cleaning the interior of the tank, by properly disposing of residual tank contents in accordance with all applicable local, State and Federal regulations, and by destroying said tank by rendering it useless for the storage of petroleum or other regulated substances through cutting or crushing; said activity taking place at: S&H TANK, INC.
HWY 157 S. VENUS, TEXAS
(ADDRESS OF DISPOSAL FACILITY)

Executed on this 13 day of May, 19 93

By: Willie Stacy Witness:

Title: PRESIDENT

Company: S&H TANK, INC.

ustforms

Quit Claim Deed for
Underground Petroleum Storage Tanks

KNOW ALL MEN BY THESE PRESENTS:

That United States A.F Force, a BUSINESS having an office at ON 183 Main, FT WORTH, TEXAS BY (hereinafter called "Transferor"), and S&H TANK, INC. a CORPORATION (hereinafter called "Transferee"), agree as follows:

Transferor hereby sells, assigns and quit claims to Transferee, his (its) heirs, successors and assigns, all of the right, title and interest of Transferor in and to the following described property AS IS, WITHOUT ANY WARRANTY OF MERCHANTABILITY OR WARRANTY OF ANY KIND:

. gal. STEEL

4-10,000 F. berglass

TO HAVE AND TO HOLD said property unto Transferee, his (its) heirs, successors and assigns forever.

The property conveyed hereunder is presently located on the premises at

ON 183 - Main, Ft Worth Tx, TEXAS

In consideration of said sale, Transferee agrees to defend, indemnify and hold Transferor, and Transferor's parent, subsidiaries and affiliates, harmless against all claims, losses and liability of every kind arising from the date hereof and arising from or related to the existence, removal, location, use or condition of said property.

Transferee further acknowledges that property is transferred for destruction purposes only and that all local, state and federal laws, codes and guidelines will be followed for its safe destruction. Transferee further recognizes that said equipment may contain harmful and explosive fumes and that extreme caution should be used when disposing of said equipment.

This instrument contains the entire agreement between the parties covering the subject matter.

Executed and delivered this 13 day of May, 19 93.

ATTEST:
By: Perry Williams Jr.

By: United States A.F Force
As its
(Transferor)

ATTEST:
By: S&H TANK, INC.

By: Willie Lacey
As its PRESIDENT
(Transferee)

APPENDIX B

Tank Contents Manifest

MOBLEY COMPANY

UST REMEDIATION FLUID / OFF-SPECIFICATION PRODUCT MANIFEST

No. 060680

CHARACTERIZATION INFORMATION

159 42

Generating Facility Name: Chesnutt AFB.

Generating Facility Address: Building 1519 Ft Worth, TX.

Business Name:

Mailing Address:

Telephone (817) 738-6061

Contractor Name/Contact: PWI.

Process Generating the Fluid (Check the Appropriate Process/Fluid Type):

Underground Storage Tank Remediation/Corrective Action
- ☑ Unleaded Gasoline
- ☐ Diesel
- ☐ Aviation Fuel
- ☐ Tank Hold Evacuation
- ☐ UST Monitoring Well Fluid

Maintenance of PST
- ☐ Unleaded Gasoline
- ☐ Diesel
- ☐ Aviation Fuel
- ☐ Fuel Oil

Total Quantity (Gallons): Bulk (✓) 100 Drum Evacuation ( )

I certify that the material removed from the above premises is not hazardous waste as identified in 40 CFR Part 261, and does not contain spent solvents or PCBs as identified in 40 CFR Part 761.

Generator Representative (Print): TERRY LARSEN Title:

Signature: Terry Larsen Date of Service: 5/13/93

TRANSPORTER INFORMATION

Name Mobley Co., Inc. Telephone 800-999-8628

EPA Transporter ID TXD000807925 State ID 40303 Truck No. 62

Driver's Name (Print) Doug Nelson Trucked Direct to Plant? Y / (N)

5/13/93 Date

Doug Nelson Driver's Signature

MOBLEY COMPANY CORSICANA FUEL FACILITY

Address: 2124 Highway 31 East

City/State: Corsicana, TX 75110

Telephone: 903-874-1188

EPA ID TXD988059291 TWC Reg. No. 20095

I certify that I have received into this facility the above listed product.

Facility Operator's Name (Print) DANNY GIBSON

5-13-93 Date Received

Danny Gibson Facility Operator's Signature

White - Generator - Original Canary - TSD Pink - Transporter Gold - Generator's 1st Copy

THE PRINT SHOP-MARSHALL
REV. 9-92

APPENDIX H

TWC

TWC LPST SITE DIRECTIVE DOCUMENTATION

159 43

SITE NAME CARSWELL AFB — UST ID NO. 009696

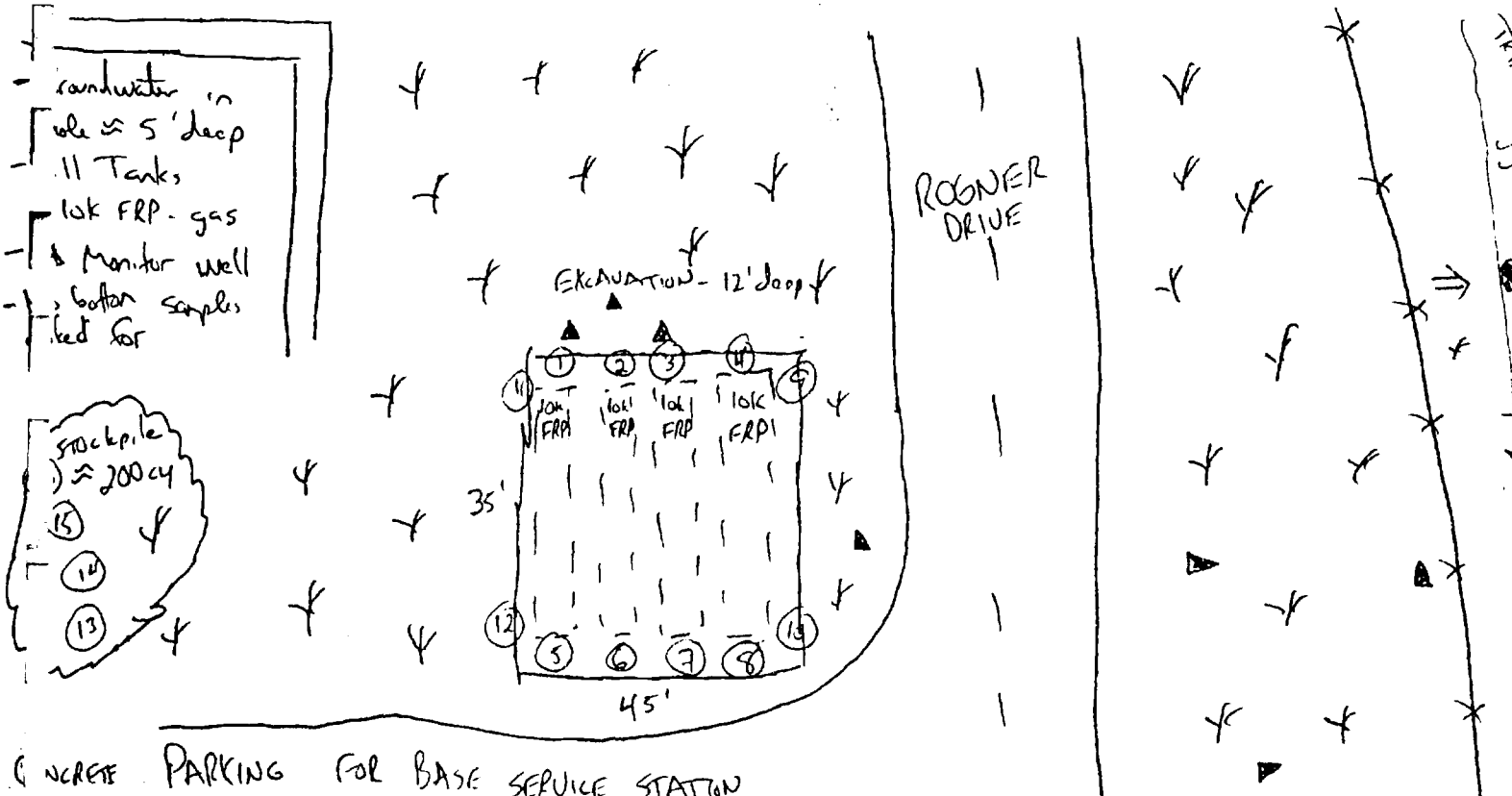
SITE ADDRESS Base Service Station Bldg 1518, Ft Worth — LPST ID NO.

TRACKING NO.

INSPECTION DATE 5/12/93 — INSPECTOR TOM ICNODE

The purpose of this form is to document field communications made between the TWC and PST owners/operators/representatives.

SITE DIAGRAM: Scale Not to scale North ↑



CONCRETE PARKING FOR BASE SERVICE STATION

Show location(s) of original (replacement) tank(s), line(s), excavation, overexcavation, boring(s), monitor/observation well(s), etc.

TAKE Composite native soil samples along North (1-4), South (5-8), East (9&10), West (11&12) walls of excavation. Take composite soil samples from stockpile ~~along~~ at a rate of 1 per 50 cy (13-16). Test all samples for TPH-BTEX and samples 13, 14 for total lead. Return fill to excavation submit report w/in 30 days

This site documentation is intended to identify the release response activities. Site-specific Corrective Action Directive (CAD) letters will be issued by the TWC following the reporting of a release. Regulatory guidance will be supplied by the TWC throughout the course of the project.

This document reflects the assessment of site conditions by the TWC and is not intended to limit the scope of remediation necessary. In order to be reimbursed by TWC, an owner or operator must be eligible under TWC rules and the items performed must be allowable and reasonable under the TWC rules. This document alone does not mean a person is eligible or that any costs incurred are allowable or reasonable.

TWC Field Inspector

5/12/93
Date

Received by Owner/Operator/Representative

5/12/93
Date

Perry Williams, Inc.
P.O. Box 30206 • Amarillo, Texas 79120

WC Environmental Group
Williams Contracting
Williams Ditching

April 30, 1993

Texas Water Commission
Attn: Tom Canode
1019 N. Duncanville Road
Duncanville, Texas 76116-2201

Dear Mr. Canode,

We would like to have the 30 day construction notification waived in order to begin removal operations of three (3) 10,000 UST's located at BX Service Station - Carswell AFB, Fort Worth, Texas. We anticipate removal operations to begin May 13, 1993.

Thank you for your consideration.

Sincerely,

Perry G. Williams
President

PGW/tf

Office (806) 373-5820 • Toll Free 1-800-445-1249 • FAX (806) 371-0340

UNDERGROUND STORAGE TANK (UST) CONSTRUCTION NOTIFICATION FORM

159 46

This form is provided to assist UST owners in complying with the construction notification requirements of TWC Rules, 31 TAC Chapter 334. The completion and filing of this form within the prescribed time should satisfy these requirements.

1. TYPE OF CONSTRUCTION: (Indicate all that apply.)

___ Installation ___ Addition X Removal ___ Other (Specify) _____
___ Replacement ___ Improvement ___ Abandonment _____

2. FACILITY LOCATION INFORMATION:

Facility Name: BX Service Station
Address/Location: 7SG/CEU Carswell AFB 76127-5000
County: Tarrant City: Fort Worth
UST Facility No. (If Known): 1518
Telephone: 817-782-6258

3. OWNER INFORMATION:

Owner: U.S. Air Force
Representative: Master Sergeant Bailey
Title: Environmental Coordinator
Address: 7SG/CEU Carswell AFB
City/State/Zip: Fort Worth, Texas 76127-5000
Telephone: 817-782-6258

4. UST CONSULTANT INFORMATION:

Company: WC Environemental Group
Representative: John F. Drake
Address: 2700 S. WIlson
City/State/Zip: Amarillo, Texas 79103
Telephone: 806-373-5820

5. UST CONTRACTOR INFORMATION:

Company: Perry Williams, Inc.
Representative: Perry Williams
Address: 2700 S. Wilson
City/State/Zip: Amarillo, Texas 79103
Telephone: 806-373-5820

6. GENERAL DESCRIPTION OF PROPOSED UST ACTIVITY: (Describe all new or replacement tanks and other UST system components. Include closure procedures for UST abandonments or removals. Attach information as appropriate.)

Permanently remove and dispose of one (1) 10,000 gallon UST , all associated piping and dispenser equipment all located at Carswell AFB, Texas Facility #1518

7. SCHEDULE/DATES FOR PROPOSED CONSTRUCTION:

Removal scheduled for 5-13-93

8. SUBMITTED BY: John F. Drake DATE: 4-30-93
Title & Company: Geologist/Environmental Consultant

9. MAIL COMPLETED FORM TO:

Texas Water Commission
Underground Storage Tank Section
P.O. Box 13087, Capitol Station
Austin, Texas 78711-3087

FOR TWC STAFF USE ONLY

Date Rec'd _____ Type Notice: _____
District _____ Dist. Rep. _____
Remarks _____
Logged by: _____ Date: _____

UNDERGROUND STORAGE TANK (UST) CONSTRUCTION NOTIFICATION FORM

159 47

This form is provided to assist UST owners in complying with the construction notification requirements of TWC Rules, 31 TAC Chapter 334. The completion and filing of this form within the prescribed time should satisfy these requirements.

1. TYPE OF CONSTRUCTION: (Indicate all that apply.)

___ Installation ___ Addition X Removal ___ Other (Specify) _____
___ Replacement ___ Improvement ___ Abandonment _____

2. FACILITY LOCATION INFORMATION:

Facility Name: BX Service Station
Address/Location: 7SG/CEU Carswell AFB
76126-5000
County: Tarrant City: Fort Worth
UST Facility No. (If Known): 1518
Telephone: 817-782-6258

3. OWNER INFORMATION:

Owner: U.S. Air Force
Representative: Master Sergeant Bailey
Title: Environmental Coordinator
Address: 7SG/CEU Carswell AFB,
City/State/Zip: Fort Worth, Tx. 76127-500(
Telephone: 817-782-6258

4. UST CONSULTANT INFORMATION:

Company: WC Environmental Group,
Representative: John F. Drake
Address: 2700 S. Wilson
City/State/Zip: Amarillo, Tx. 79103
Telephone: 806-373-5820

5. UST CONTRACTOR INFORMATION:

Company: Perry Williams, Inc.
Representative: Perry Williams
Address: 2700 S. Wilson
City/State/Zip: Amarillo, Tx. 79103
Telephone: 806-373-5820

6. GENERAL DESCRIPTION OF PROPOSED UST ACTIVITY: (Describe all new or replacement tanks and other UST system components. Include closure procedures for UST abandonments or removals. Attach information as appropriate.)

Permanently remove and dispose of three (3) 10,000 gallon UST, all associated piping and dispenser equipment, all located at Carswell AFB, Tx, Facility #1518

7. SCHEDULE/DATES FOR PROPOSED CONSTRUCTION:

Removal scheduled for 5/13/93

8. SUBMITTED BY: John F. Drake DATE: 4-30-93

Title & Company: Geologist/Environmental Consultant

9. MAIL COMPLETED FORM TO:

Texas Water Commission
Underground Storage Tank Section
P.O. Box 13087, Capitol Station
Austin, Texas 78711-3087

FOR TWC STAFF USE ONLY

Date Rec'd _____ Type Notice: _____
District _____ Dist. Rep. _____
Remarks _____

Logged by: _____ Date: _____

TITLE	ID #	NAME	STREET	CITY	STATE	ZIP CODE	CTY
UST : 2	STATUS: 1 0/ 0/ 0		CNTN: 1/ / MAT: 1 REL: 6/7	SUB: 3/ SPILL: /		CORR: 3/ /	
UST-PIPE:	SIZE: 315 INSTALL: /1963		CNTN: 1/ MAT: 1 REL: 6/			CORR: 3/	
UST-OTH :							
OWNER : 01339	LUMBER TREATING CO.	6813 EAST ROSEDALE-PO BOX 845		FT WORTH	TX	76124	
FACILITY: 0002143	LUMBER TREATING CO.	6813 E ROSEDALE		FT WORTH	TX	76124	220
UST : 1	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 1 REL: /	SUB: 2/ SPILL: /		CORR: A/ /	
UST-PIPE:	SIZE: 1000 INSTALL: /1970		CNTN: / MAT: REL: /			CORR: 7/	
UST-OTH :							
UST : 2 REG	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 1 REL: /	SUB: 9/ SPILL: /		CORR: A/ /	
UST-PIPE:	SIZE: 12000 INSTALL: /1970		CNTN: / MAT: REL: /			CORR: 7/	
UST-OTH :				NAPTHA			
UST : 3 GREEN	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: A/ /	
UST-PIPE:	SIZE: 12000 INSTALL: /1970		CNTN: / MAT: REL: /			CORR: 7/	
UST-OTH :				NAPHTHA			
OWNER : 03433	JEB ENTERPRISES, INC.	1388 RAVENSWOOD		GRANBURY	TX	76048	
FACILITY: 0005533	A HANDY GROCERY STORE	RT 5 BOX 271 H		BENBROOK	TX	76126	220
UST : 1	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 1 REL: /	SUB: 2/ SPILL: /		CORR: A/ /	
UST-PIPE:	SIZE: 89 INSTALL: /9999		CNTN: / MAT: 1 REL: /			CORR: /	
UST-OTH :							
UST : 2	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 1 REL: /	SUB: 2/ SPILL: /		CORR: A/ /	
UST-PIPE:	SIZE: 89 INSTALL: /9999		CNTN: / MAT: 1 REL: /			CORR: /	
UST-OTH :							
OWNER : 04532	CARSWELL AFB	7CSG/DEEV		CARSWELL AFB	TX	76127 5000	
FACILITY: 0009686	CARSWELL AFB	BLDG 1255 CARSWELL		CARSWELL AFB	TX	76128 5000	220
UST : GCA-1	STATUS: 3 0/ 0/ 0		CNTN: / / MAT: REL: /	SUB: / SPILL: /		CORR: 7/ /	
UST-PIPE:	SIZE: 89 INSTALL: /9999		CNTN: / MAT: REL: /			CORR: 7/	
UST-OTH :				JP-4			
UST : GCA-2	STATUS: 3 0/ 0/ 0		CNTN: / / MAT: REL: /	SUB: 2/ SPILL: /		CORR: 7/ /	
UST-PIPE:	SIZE: 99 INSTALL: /9999		CNTN: / MAT: REL: /			CORR: 7/	
UST-OTH :							
UST : 1A	STATUS: 1 0/ 0/ 0		CNTN: 2/ / MAT: 5 REL: 1/4	SUB: 3/ SPILL: 1/2		CORR: B/ /	
UST-PIPE:	SIZE: 300 INSTALL: 09/1991		CNTN: 2/8 MAT: REL: 1/6			CORR: B/	
UST-OTH :			STIP 3				
UST : 1015-2	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 1 REL: 1/6	SUB: / SPILL: /		CORR: A/ /	
UST-PIPE:	SIZE: 3000 INSTALL: /1967		CNTN: / MAT: 1 REL: 1/6			CORR: /	
UST-OTH :				JP-4			
UST : 1040-1	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: REL: /	SUB: 3/ SPILL: /		CORR: 7/ /	
UST-PIPE:	SIZE: 500 INSTALL: /9999		CNTN: / MAT: REL: /			CORR: 7/	
UST-OTH :							
UST : 1064-1	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 1 REL: 1/6	SUB: 2/ SPILL: /		CORR: 3/A/	
UST-PIPE:	SIZE: 10000 INSTALL: /1986		CNTN: / MAT: 2 REL: 1/6			CORR: /	
UST-OTH :							

TITLE	ID #	NAME	STREET	CITY	STATE	ZIP CODE	CTY
UST : 1064-2	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 1 REL: 1/6	SUB: 2/ SPILL: /		CORR: 3/A/	
UST-PIPE:	SIZE: 10000 INSTALL: /1988		CNTN: / MAT: 2 REL: 1/6			CORR: /	
UST-OTH :							
UST : 1064-3	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 1 REL: 1/6	SUB: 2/ SPILL: /		CORR: 3/A/	
UST-PIPE:	SIZE: 10000 INSTALL: /1988		CNTN: / MAT: 2 REL: 1/6			CORR: /	
UST-OTH :							
UST : 1064-4	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 1 REL: 1/6	SUB: 2/ SPILL: /		CORR: 3/A/	
UST-PIPE:	SIZE: 10000 INSTALL: /1988		CNTN: / MAT: 2 REL: 1/6			CORR: /	
UST-OTH :							
UST : 1140-1	STATUS: 4 2/ 1/89		CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 7/ /	
UST-PIPE:	SIZE: 600 INSTALL: /8889		CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			NONE	CRANKCASE OIL			
UST : 1140-2	STATUS: 4 2/ 1/89		CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: / /	
UST-PIPE:	SIZE: 600 INSTALL: /8888		CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			NONE	CRANKCASE OIL			
UST : 1194-1	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 1 REL: 1/6	SUB: / SPILL: /		CORR: 3/ /	
UST-PIPE:	SIZE: 2000 INSTALL: /1983		CNTN: / MAT: REL: 1/6			CORR: 7/	
UST-OTH :				JP-4			
UST : 1411-1	STATUS: 1 0/ 0/ 0		CNTN: 1/ / MAT: 1 REL: 1/6	SUB: 3/ SPILL: 4/		CORR: 7/ /	
UST-PIPE:	SIZE: 400 INSTALL: 01/1955		CNTN: 1/ MAT: 1 REL: 1/6			CORR: 7/	
UST-OTH :							
UST : 1411-2	STATUS: 1 0/ 0/ 0		CNTN: 1/ / MAT: 1 REL: 1/	SUB: 2/ SPILL: 4/		CORR: 7/ /	
UST-PIPE:	SIZE: 2000 INSTALL: /8889		CNTN: 1/ MAT: 1 REL: 1/			CORR: 7/	
UST-OTH :							
UST : 1411-3	STATUS: 1 0/ 0/ 0		CNTN: 1/ / MAT: 1 REL: 1/	SUB: / SPILL: 4/		CORR: 7/ /	
UST-PIPE:	SIZE: 2000 INSTALL: /8889		CNTN: 1/ MAT: 1 REL: 1/			CORR: 7/	
UST-OTH :				JP-4			
UST : 1425-1	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: REL: 1/6	SUB: 3/ SPILL: /		CORR: 7/ /	
UST-PIPE:	SIZE: 1000 INSTALL: 01/1955		CNTN: / MAT: REL: 1/6			CORR: 7/	
UST-OTH :							
UST : 1427-1	STATUS: 4 4/11/90		CNTN: / / MAT: REL: /	SUB: 3/ SPILL: /		CORR: 7/ /	
UST-PIPE:	SIZE: 500 INSTALL: /9999		CNTN: / MAT: REL: /			CORR: 7/	
UST-OTH :							
UST : 1518-1	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 2 REL: 1/6	SUB: 2/ SPILL: /		CORR: C/ /	
UST-PIPE:	SIZE: 10000 INSTALL: /1972		CNTN: / MAT: 2 REL: 1/6			CORR: /	
UST-OTH :							
UST : 1518-2	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 2 REL: /	SUB: 2/ SPILL: /		CORR: C/ /	
UST-PIPE:	SIZE: 10000 INSTALL: /1972		CNTN: / MAT: 2 REL: /			CORR: /	
UST-OTH :							
UST : 1518-3	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 2 REL: /	SUB: 2/ SPILL: /		CORR: C/ /	
UST-PIPE:	SIZE: 10000 INSTALL: /1972		CNTN: / MAT: 2 REL: /			CORR: /	
UST-OTH :							
UST : 1518-4	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 2 REL: /	SUB: 2/ SPILL: /		CORR: C/ /	
UST-PIPE:	SIZE: 10000 INSTALL: /1972		CNTN: / MAT: 2 REL: /			CORR: /	
UST-OTH :							
UST : 1828-1	STATUS: 1 0/ 0/ 0		CNTN: / / MAT: 1 REL: 1/6	SUB: 2/ SPILL: /		CORR: 3/ /	
UST-PIPE:	SIZE: 1000 INSTALL: /1982		CNTN: / MAT: 1 REL: 1/6			CORR: 7/	
UST-OTH :							

UST	1628-2	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT: 1	REL: 1/6	SUB: 3/		SPILL: /		CORR: 3/ /	
UST-PIPE:		SIZE:	1000 INSTALL: /1982		CNTN: /	MAT: 1	REL: 1/6					CORR: 7/	
UST-OTH :													
UST	1628-3	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT: 1	REL: 1/6	SUB: /		SPILL: /		CORR: 3/ /	
UST-PIPE:		SIZE:	2000 INSTALL: /1982		CNTN: /	MAT: 1	REL: 1/6					CORR: 7/	
UST-OTH :								JP-4					
UST	1629-1	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT:	REL: 1/6	SUB: 3/		SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE:	500 INSTALL: 01/1980		CNTN: /	MAT:	REL: 1/6					CORR: 7/	
UST-OTH :													
UST	1658-1	STATUS: 3	0/ 0/ 0		CNTN: / /	MAT:	REL: /	SUB: 3/		SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE:	275 INSTALL: /9999		CNTN: /	MAT:	REL: /					CORR: 7/	
UST-OTH :													
UST	1750-1	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT: 2	REL: 1/6	SUB: 3/		SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE:	8000 INSTALL: 01/1985		CNTN: /	MAT:	REL: 1/6					CORR: 7/	
UST-OTH :													
UST	1750-2	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT: 1	REL: /	SUB: 3/		SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE:	20000 INSTALL: /1946		CNTN: /	MAT:	REL: /					CORR: 7/	
UST-OTH :													
UST	3000-1	STATUS: 3	10/31/85		CNTN: / /	MAT: 1	REL: 1/6	SUB: 3/		SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE:	15000 INSTALL: /9999		CNTN: /	MAT:	REL: 1/6					CORR: 7/	
UST-OTH :													
UST	3000-1	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT: 2	REL: /	SUB: 3/		SPILL: /		CORR: C/ /	
UST-PIPE:		SIZE:	15000 INSTALL: /9889		CNTN: /	MAT:	REL: /					CORR: /	
UST-OTH :						BLACK							
UST	3000-2	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT: 2	REL: /	SUB: 3/		SPILL: /		CORR: C/ /	
UST-PIPE:		SIZE:	15000 INSTALL: /9999		CNTN: /	MAT:	REL: /					CORR: /	
UST-OTH :						BLACK							
UST	3000-2	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT:	REL: 1/6	SUB: /		SPILL: /		CORR: / /	
UST-PIPE:		SIZE:	15000 INSTALL: 01/1985		CNTN: /	MAT:	REL: 1/6					CORR: /	
UST-OTH :													
UST	3359-1	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT:	REL: 1/6	SUB: 3/		SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE:	2000 INSTALL: 01/1979		CNTN: /	MAT:	REL: 1/6					CORR: 7/	
UST-OTH :													
UST	3360-1	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT:	REL: 1/6	SUB: 3/		SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE:	5000 INSTALL: 01/1978		CNTN: /	MAT:	REL: 1/6					CORR: 7/	
UST-OTH :													
UST	4111-1	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT:	REL: 1/6	SUB: 3/		SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE:	500 INSTALL: 01/1979		CNTN: /	MAT:	REL: 1/6					CORR: 7/	
UST-OTH :													
UST	4115-1	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT:	REL: /	SUB: 3/		SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE:	500 INSTALL: /9999		CNTN: /	MAT:	REL: /					CORR: 7/	
UST-OTH :													
UST	4127-1	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT:	REL: 1/6	SUB: 3/		SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE:	500 INSTALL: 01/1959		CNTN: /	MAT:	REL: 1/6					CORR: 7/	
UST-OTH :													
UST	4141-1	STATUS: 1	0/ 0/ 0		CNTN: / /	MAT:	REL: 1/6	SUB: 3/		SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE:	250 INSTALL: 01/1958		CNTN: /	MAT:	REL: 1/6					CORR: 7/	
UST-OTH :													

139 43

PST-RPTCTY

TEXAS WATER COMMISSION

PETROLEUM STORAGE TANKS BY OWNER AND FACILITY IN COUNTY ORDER

PAGE 1

TITLE	ID #	NAME	STREET	CITY	STATE	ZIP CODE	CTY
UST	4143-1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: REL: 1/6	SUB: 3/ SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE: 1000 INSTALL: 01/1964	CNTN: / MAT: REL: 1/6			CORR: 7/	
UST-OTH :							
UST	4145-1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: REL: 1/6	SUB: 3/ SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE: 500 INSTALL: 01/1981	CNTN: / MAT: REL: 1/6			CORR: 7/	
UST-OTH :							
UST	4150-1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4150-2	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4150-3	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4150-4	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4150-5	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4150-6	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4152-1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4152-2	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4152-3	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4152-4	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4152-5	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4152-6	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4153-1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1952	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST	4153-2	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1952	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			

FORM 2UPBOX

TITLE	ID #	NAME	STREET	CITY	STATE	ZIP CODE	CTY
UST :	4153-3	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1952	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4153-4	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1952	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4153-5	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1952	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4153-8	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1952	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4154-1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH40	JP-4			
UST :	4154-2	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4154-3	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4154-4	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4154-5	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /3989	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4154-6	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1951	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4155-1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: REL: 1/6	SUB: 3/ SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE: 1000 INSTALL: 01/1955	CNTN: / MAT: REL: 1/6			CORR: 7/	
UST-OTH :							
UST :	4170-1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1952	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4170-2	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1952	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4170-3	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1952	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4170-4	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1952	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4170-5	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1952	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			

TITLE	ID #	NAME	STREET	CITY	STATE	ZIP CODE	CTY
UST :	4170-6	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: / SPILL: /		CORR: 3/A/	
UST-PIPE:		SIZE: 25000 INSTALL: /1932	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			SCH 40	JP-4			
UST :	4171-1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: REL: 1/6	SUB: 3/ SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE: 5000 INSTALL: 01/1976	CNTN: / MAT: REL: 1/6			CORR: 7/	
UST-OTH :							
UST :	4205-1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 2 REL: 1/6	SUB: / SPILL: /		CORR: C/ /	
UST-PIPE:		SIZE: 550 INSTALL: /1988	CNTN: / MAT: REL: 1/6			CORR: 7/	
UST-OTH :				SLOP WASTE			
UST :	4210-1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 2 REL: 1/6	SUB: / SPILL: /		CORR: C/ /	
UST-PIPE:		SIZE: 8000 INSTALL: /1985	CNTN: / MAT: REL: 1/8			CORR: /	
UST-OTH :			STAINL	JP-10			
UST :	4210-2	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 2 REL: /	SUB: / SPILL: /		CORR: C/ /	
UST-PIPE:		SIZE: 8000 INSTALL: /1985	CNTN: / MAT: REL: /			CORR: /	
UST-OTH :			STAINL	JP-10			
UST :	4210-3	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 2 REL: 1/6	SUB: / SPILL: /		CORR: C/ /	
UST-PIPE:		SIZE: 8000 INSTALL: /1985	CNTN: / MAT: REL: 1/6			CORR: /	
UST-OTH :			STAINL	JP-10			
UST :	4216-1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: REL: 1/6	SUB: 3/ SPILL: /		CORR: 7/ /	
UST-PIPE:		SIZE: 5000 INSTALL: 01/1983	CNTN: / MAT: REL: 1/6			CORR: 7/	
UST-OTH :							
UST :	8514-1	STATUS: 4 4/11/90	CNTN: / / MAT: 1 REL: /	SUB: 3/ SPILL: /		CORR: A/ /	
UST-PIPE:		SIZE: 1200 INSTALL: /1971	CNTN: / MAT: 1 REL: /			CORR: /	
UST-OTH :							
AST :	1	STATUS: 2 12/31/91	CNTN: MAT: 1	SUB: 7			
AST-OTH :		SIZE: 11500 INSTALLED: 1953					
AST :	2	STATUS: 2 12/31/91	CNTN: MAT: 1	SUB: 7			
AST-OTH :		SIZE: 11500 INSTALLED: 1953					
AST :	3	STATUS: 2 12/31/91	CNTN: MAT: 1	SUB: 7			
AST-OTH :		SIZE: 11500 INSTALLED: 1983					
AST :	4	STATUS: 2 12/31/91	CNTN: MAT: 1	SUB: 7			
AST-OTH :		SIZE: 11500 INSTALLED: 1953					
AST :	5	STATUS: 2 12/31/91	CNTN: MAT: 1	SUB: 7			
AST-OTH :		SIZE: 12500 INSTALLED: 1963					
AST :	6	STATUS: 2 12/31/91	CNTN: MAT: 1	SUB: 7			
AST-OTH :		SIZE: 5000 INSTALLED: 1963					

OWNER :	00244	CITY OF BENBROOK	911 WINSCOTT ROAD	BENBROOK	TX	76126	
FACILITY:	0000305	CITY MAINTENANCE GARAGE	5509 OLD BENBROOK RD	BENBROOK	TX	76126	220
UST :	1	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: 2/ SPILL: /		CORR: A/ /	
UST-PIPE:		SIZE: 4000 INSTALL: /1976	CNTN: / MAT: 1 REL: /			CORR: /	
UST-OTH :							
UST :	2	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: 2/ SPILL: /		CORR: A/ /	
UST-PIPE:		SIZE: 3000 INSTALL: /1976	CNTN: / MAT: 1 REL: /			CORR: /	
UST-OTH :							
UST :	3	STATUS: 1 0/ 0/ 0	CNTN: / / MAT: 1 REL: /	SUB: 3/ SPILL: /		CORR: A/ /	
UST-PIPE:		SIZE: 1000 INSTALL: /1976	CNTN: / MAT: 1 REL: /			CORR: /	
UST-OTH :							

TEXAS WATER COMMISSION – UNDERGROUND STORAGE TANK REGISTRATION FORM

FOR USE IN TEXAS

Please Mail Completed Form To: UST Registration Section, PST Division, Texas Water Commission, P.O. Box 13087 • Capitol Station, Austin, TX 78711-3087

Tax ID Number *(Optional)*

Facility ID Number *(If known)* 009696

Owner ID Number *(If known)* 04532

I. OWNER INFORMATION

Owner Name: U.S. Air Force

Mailing Address: 7SG/CEU Carswell AFB

City: Fort Worth | State: TX | Zip Code: 76127-5000

County: Tarrant

Contact Person: Master Sergeant Bailey | Telephone: (817) 782-6258

TYPE OF OWNER

- Private or Corporate ☐
- Local Government ☐
- State Government ☐
- Federal Government ☒

Location of Records (if off-site) Address, City, State

Custodian of Records | Telephone ( )

II. FACILITY INFORMATION

Facility Name: BX Service Station #1518

Physical Address: 7SG/CEU Carswell AFB

City: Fort Worth, | State: TX | Zip Code: 76127

County: Tarrant

Contact Person: Master Sergeant Bailey | Telephone: (817) 782-6258

TYPE OF FACILITY (mark all that apply)

- Retail ☐
- Fleet Refueling ☐
- Industrial, Chemical, or Manufacturing Plant ☐
- Wholesale ☐
- Farm or Residential ☐
- Aircraft Refueling ☐
- Indian Land ☐
- Other *(please specify)* Military Installation

Number of Underground Tanks at This Facility ______

Number of Aboveground Tanks at This Facility ______

III. REGISTRATION STATUS

If this is the first time that this facility has been registered, or if you are not sure if it has been registered, mark here: ORIGINAL FORM ☐

If this is an amendment (e.g. ownership change, location name change or UST status change) to a form that was previously filed with the TWC, mark here: AMENDED FORM ☒

NOTE: If this is an amendment to a UST form that has already been filed with the Texas Water Commission, briefly explain the change in the space provided (attach additional sheets if necessary). Please include dates, names, addresses, phone numbers and any other pertinent information.

Four (4) 10,000 gallon fiberglass UST's removed by Perry Williams, Inc. P.O. Box 30206 Amarillo, Tx. 79120 (806) 373-5820

IV. FINANCIAL RESPONSIBILITY

COMPLIANCE DATE (mark one)

Sept. 29, 1989 ☐ Oct. 26, 1989 ☐ April 26, 1990 ☐ Oct. 26, 1990 ☐

FINANCIAL RESPONSIBILITY MECHANISM (mark all that apply)

- Letter of Credit ☐
- Guarantee ☐
- Trust Fund ☐
- Self Insured ☐
- Insurance or Risk Retention Group ☐
- PST Remediation Fund ☐
- Surety Bond ☐
- Standby Trust Fund ☐

Other *(please specify)* ______

V. INSTALLER CERTIFICATION

NOTE: This section must be completed and signed by the installer. Leave blank if no installation activity is involved.

I certify that the information provided concerning recent installations is true to the best of my belief and knowledge:

Was tank testing completed during and after installation? ☐ Yes ☐ No

Installation Company Name *(print)* ______ Contractor's Registration Number ______

Installer's Name *(print)* ______ Installer's License Number ______

Installer Signature ______ Date Signed ______

VI. OWNER CERTIFICATION

...tify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and based on my ...iry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Owner or Owner's Authorized Representative *(print)* U.S. Air Force

Title *(print)* Natural Resource Planner

Signature [signature]

Date Signed 23 July 93

TNRCC-0724 (12-90-89)

VII. DESCRIPTION OF UNDERGROUND STORAGE TANKS (UST's)

Tank ID (e.g. 1, 2, 3 or A, B, C)	Tank A	Tank B	Tank C	Tank D
TANK STATUS				
Tank Installation Date *(month/year)*	10,000	10,000	10,000	10,000
Tank Capacity *(gallons)*				
1. Currently in Use	1. ☐	1. ☐	1. ☐	1. ☐
2. Temporarily Out of Service *(date)*	2. / /	2. / /	2. / /	2. / /
Emptied *(Yes/No)*	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
3. Permanently Abandoned In-place *(date)* (must be filled with sand or concrete, etc.)	3. / /	3. / /	3. / /	3. / /
4. Permanently Removed from the Ground *(date)*	4. 5 / 13 / 93	4. 5 / 13 / 93	4. 5 / 13 / 93	4. 5 / 13 / 93
UST CONSTRUCTION AND CONTAINMENT	Tank / Piping	Tank / Piping	Tank / Piping	Tank / Piping
1. Single Wall (mark all that apply) ☒	1. ☐ ☐	1. ☐ ☐	1. ☐ ☐	1. ☐ ☐
2. Double Wall	2. ☐ ☐	2. ☐ ☐	2. ☐ ☐	2. ☐ ☐
3. External Jacket System	3. ☐ ☐	3. ☐ ☐	3. ☐ ☐	3. ☐ ☐
4. Excavation/Trench Liner System	4. ☐ ☐	4. ☐ ☐	4. ☐ ☐	4. ☐ ☐
5. Piping System:	5.	5.	5.	5.
a. Pressurized	a. ☐	a. ☐	a. ☐	a. ☐
b. Suction	b. ☐	b. ☐	b. ☐	b. ☐
c. Gravity	c. ☐	c. ☐	c. ☐	c. ☐
6. Other *(please specify)*	6.	6.	6.	6.
MATERIAL OF CONSTRUCTION	Tank / Piping	Tank / Piping	Tank / Piping	Tank / Piping
1. Steel	1. ☐ ☐	1. ☐ ☐	1. ☐ ☐	1. ☐ ☐
2. Fiberglass-Reinforced Plastic (FRP)	2. ☐ ☐	2. ☐ ☐	2. ☐ ☐	2. ☐ ☐
3. Composite (steel w/FRP laminate)	3. ☐	3. ☐	3. ☐	3. ☐
4. Concrete	4. ☐ ☐	4. ☐ ☐	4. ☐ ☐	4. ☐ ☐
5. Other *(please specify)*	5.	5.	5.	5.
RELEASE DETECTION (mark all that apply) ☒	Tank / Piping	Tank / Piping	Tank / Piping	Tank / Piping
1. Vapor Monitoring	1. ☐ ☐	1. ☐ ☐	1. ☐ ☐	1. ☐ ☐
2. Groundwater Monitoring	2. ☐ ☐	2. ☐ ☐	2. ☐ ☐	2. ☐ ☐
3. Monitoring Above Excavation Liner	3. ☐ ☐	3. ☐ ☐	3. ☐ ☐	3. ☐ ☐
4. Automatic In-Tank Monitoring & Inventory Control	4. ☐	4. ☐	4. ☐	4. ☐
5. Interstitial Monitoring for Double Wall USTs	5. ☐ ☐	5. ☐ ☐	5. ☐ ☐	5. ☐ ☐
6. Tightness Testing	6. ☐ ☐	6. ☐ ☐	6. ☐ ☐	6. ☐ ☐
7. Inventory Control	7. ☐	7. ☐	7. ☐	7. ☐
8. Unknown/None	8. ☐ ☐	8. ☐ ☐	8. ☐ ☐	8. ☐ ☐
9. Line Leak Detectors	9. ☐	9. ☐	9. ☐	9. ☐
10. Other *(please specify)*	10.	10.	10.	10.
SUBSTANCE STORED				
1. Empty 4. Kerosene	1. ☐ 4. ☐	1. ☐ 4. ☐	1. ☐ 4. ☐	1. ☐ 4. ☐
2. Gasoline 5. Used Oil	2. ☐ 5. ☐	2. ☐ 5. ☐	2. ☐ 5. ☐	2. ☐ 5. ☐
3. Diesel 6. New Oil	3. ☐ 6. ☐	3. ☐ 6. ☐	3. ☐ 6. ☐	3. ☐ 6. ☐
7. Other Petroleum Product *(please specify)*	7.	7.	7.	7.
8. Hazardous Substance	8.	8.	8.	8.
a. Name of Principal CERCLA Substance	a.	a.	a.	a.
b. Chemical Abstract Service (CAS) No.	b.	b.	b.	b.
c. Mixture of Hazardous Substances	c. ☐	c. ☐	c. ☐	c. ☐
9. Mixture of Petroleum & Hazardous Substance	9. ☐	9. ☐	9. ☐	9. ☐
10. Other *(please specify)*	10.	10.	10.	10.
SPILL AND OVERFILL PREVENTION				
1. Tight-Fill Fitting (mark all that apply) ☒	1. ☐	1. ☐	1. ☐	1. ☐
2. Spill Container/Liquid-Tight Sump	2. ☐	2. ☐	2. ☐	2. ☐
3. Automatic Overfill Device:	3.	3.	3.	3.
a. Shut-Off Valve	a. ☐	a. ☐	a. ☐	a. ☐
b. Flow Restrictor Valve	b. ☐	b. ☐	b. ☐	b. ☐
c. High Level Alarm	c. ☐	c. ☐	c. ☐	c. ☐
4. Unknown/None	4. ☐	4. ☐	4. ☐	4. ☐
CORROSION PROTECTION	Tank / Piping	Tank / Piping	Tank / Piping	Tank / Piping
1. External Coatings: (mark all that apply) ☒	1.	1.	1.	1.
a. Painted (e.g. asphaltic)	a. ☐	a. ☐	a. ☐	a. ☐
b. Dielectric (e.g. coal tar epoxy)	b. ☐ ☐	b. ☐ ☐	b. ☐ ☐	b. ☐ ☐
c. Fiberglass-Reinforced Plastic	c. ☐	c. ☐	c. ☐	c. ☐
d. Taped/Wrapped Piping	d. ☐	d. ☐	d. ☐	d. ☐
2. Internally Lined Tank (e.g. epoxy resin)	2. ☐	2. ☐	2. ☐	2. ☐
3. Cathodic Protection System	3. ☐ ☐	3. ☐ ☐	3. ☐ ☐	3. ☐ ☐
4. Composite Tank (steel w/FRP laminate)	4. ☐	4. ☐	4. ☐	4. ☐
5. Noncorrodible Material Construction	5. ☐ ☐	5. ☐ ☐	5. ☐ ☐	5. ☐ ☐
6. Electical Isolation	6. ☐ ☐	6. ☐ ☐	6. ☐ ☐	6. ☐ ☐
7. Unknown/None	7. ☐ ☐	7. ☐ ☐	7. ☐ ☐	7. ☐ ☐

APPENDIX I

U.S. Army Corps of Engineers

FORT WORTH DISTRICT, CORPS OF ENGINEERS
701 CAMP WISDOM ROAD
GRAND PRAIRIE, TEXAS 75052-2404

REPLY TO
ATTENTION OF:

159 54

May 6, 1993

North Texas Area Office

Perry Williams
Post Office Box 30286
Amarillo, Texas 79120

Gentlmen,

Reference Delivery Order No. 2 on your Contract No. DACW63-92-D-0046, Indefinite Quantity Contract for Removal and Disposal of Underground Storage Tanks, Various Locations in Texas and Louisiana (Zone 3).

This letter serves as your authorization to begin work on Deliver Order No. 2. You are requested to acknowledge receipt of this letter in the space provided below and return an acknowledged copy of this letter to me at the following address:

Area Engineer
North Texas Area Office
701 Camp Wisdom Road
Grand Prairie, Texas 75052-2404

You are reminded that, in accordance with the terms of Delivery Order No. 2, you have thirty (30) calendar days from receipt of this letter to complete this work.

Sincerely,

Thomas E. Trainer, P. E.
Authorized Representative
of the Contracting Officer

Receipt is acknowledged:

Perry Williams
Name

President
Title

5-10-93
Date

APPENDIX J

Miscellaneous Correspondence

4-10,000 (11,280) FIBERGLASS INSTALLED 1972/73

159 58

LEAKING UNDERGROUND STORAGE TANK

8 April	Environmental Management Flight notified of "Something bubbling into the Trinity River" Base personnel investigated site and found some type of petroleum product coming up into the water. CE placed booms around the site and another down stream to contain product. Release into Trinity River reported to Texas Water Commission (TWC) by Mr Lance Key, CE Enviromental Flight. CE personnel have since then continued to monitor booms.
NOT SURE	CE Personnel notified _____ of leak into Trinity River since they have a fuel line which runs near the Trinity. _____ informed Carswell that the line was not being used, however, they investigated their pipeline and notified Carswell that they did not feel their pipeline was the problem.
16 April	Notice of Violation issued by TWC for leak in Trinity River.
28 April	CE notified TWC of actions being taken by Carswell to obtain money and our plan to install additional monitoring wells and conduct electro-magnetic survey.
15 May	$50,000 funds received from Base Disposal Agency for preliminary investigation.
24 June	Blank Purchase Agreement set-up with multiple Environmental Service companies.
29 July	Order issued to Maxim Engineering and Magna Scan to begin investigation.
11 Aug	Maxim Engineering installed two monitoring wells. Soil and water sample analysis to be received 24 Sept.
13 Aug	Underground investigation conducted by Magna Scan. Results to be received 25 Sept.
27 Aug	Mr. Paul, BX gas station, requested leak test on one tank due to 900 gallon variance in their recordkeeping and due to inconclusive results from their own leak tests.
2 Sept	UST Services, Inc. leak tested suspect tank. Tank was determined leaking due to inability to fill the tank to full. Tank was emptied.
4 Sept	TWC visited site to investigate the tanks and the monitoring wells. They requested we do an immediate action on the free product found in the Monitoring Well North of the Tanks.
8 Sept	CE Personnel pumped fluid out of monitoring well next to the service station North of the tanks.
9 Sept	TWC issued 9-Point corrective action letter.

concentration, all the way to the base boundary fence. Mr Key recommended and began actions to place monitoring wells on the other side of the Trinity River.

159 57

11 Sept — CE dipped well across from the gas station and found no free product.

11 Sept — UST Services Inc. verbally confirmed two additional tanks leaking, at a rate of .75 gallons per hour, and one tank tight. Lines to pumps were not tested. Emptied leaking tanks.

14 Sept — CE Personnel once again pumped fluid out of monitoring well next to the service station North of the tanks.

14 Sept — Randy Varner notified Duncanville office of TWC, Mr. Knode, of the two additional tanks that are leaking.

15 Sept — Meeting with two contractors and the Corps of Engineers on contract to remove free product from the Service Station as well as determine the extent of contamination. Contractors will send their proposals to LGLC ASAP and both indicated they would be able to start the week of 21 September, if desired.

15 Sept — Notified TWC (Mr Tom Knode) of tank suspected of leaking by UST Services leak testing. Told TWC that we have also emptied this tank pending further investigation.

16 Sept — Capt Layton suggested it would be wise to call the TWC on a daily basis with an update of the BX service station situation.

16 Sept — Called TWC and talked to Mr Knode. Informed him of our meetings with contractors and that they will pump free product out and assess extent of contamination.

Called out to Base at 1800 with Lt Manning by Lt Col Gonzalez. Col Szafranski wants meeting on BX Service Station at 0830, 17 Sept. JA briefed Col Szafranski that in talks with regulators they felt we were not doing enough to respond to situation. We worked on timelines stemming from 8 April when the leak into the Trinity River was first discovered.

17 Sept — Capt Van Shaack notified Duncanville office, Mr. Knode, of the sequence of events on the gas station tanks. Seemed to be satisfied with the progression of events.

17 Sept — Meeting with Col Szafranski, Col Gross, JA and AAFES to discuss BX Service Station. It was decided to empty fourth tank and close BX service station. Col Szafranski emphasized importance of JA and CE coordinating with each other. The main purpose of meeting was to talk of events from 31 Aug since leak was discovered and discussed our plan.

17 Sept — Took SOW to LGLC. Mr McNeil feels a BPA is the way to go. Requested to meet with Mr Varner on 18 Sep when he returns from TDY.

17 Sept — Drafted MSG to ACC/CEV and faxed copy also. Message asked

party lead.

17 Sept — CE personnel check monitoring wells. Sites across road OK, no fuel. Site North of USTs 3'1" water, 2" fuel. 159 53

18 Sept — Met with contracting and decided BPA was best way to go for response. Reaccomplished a shorter statement of work.

21 Sept — SOW for BPA went to contracting.

21 Sept — Received call from Capt McGhee, ACC/CEV, about priority message we sent. I told him the main reason we were asking requesting state-lead possibility was because we could only do a limited amount to respond or else we would be getting into BRAC money. Capt McGee stated that after talking to Lt Manning, he feels they can separate this from IRP funds and use different money.

21 Sept — Mr Tom Knode called referencing leak of UST at Bldg 1628 which was called on in 18 Sept. I also told him that we had SOW at contracting for response to UST leak. He told me to contact tWC before any work starts. Permits would not be required unless there is a surface discharge.

Questions in my mind:

In the beginning (approx 8 April) I know we notified several agencies of leak into Trinity River. Exactly Who all did we notify?

When did we request funds to investigate and what priority was this given by Carswell? (i.e. Capt Reed's ECAMP paperwork show the wing made this Priority 3)

24 June - What is Blank Purchase Agreement for?

Have we ever requested copies of fuel reports from AAFES? If So what did they indicate and timelines?

11 & 13 August Events - What were preliminary findings?

27 August to 2 September - Was Leaking tank emptied?

2 September - Approx how much product was put into tank? Approx how much "disappeared"?

9 September - What have we done about/on Letter issued by TWC?

11 September - Why was this done? Who requested it?

APPENDIX K

Xerox Copies of Field Site Book

DIRT HAULED IN:

5/12/93 - 216 C. YDS
5/15/93 - 216 C. YDS.
5/18/93 - 12 CYD TOP SOIL

CONCRETE REMOVED:

5/12/93 - 24 C. YDS

5/20/93 - 24 C. YDS TOP SOIL

432 YD BACKFILL
36 YD - TOP SOIL

FLUIDS REMOVED:

5/13/93 - 100 GALLONS FROM ALL 4 TANKS TOTAL.

OWNER INFORMATION

U.S. AIR FORCE

REPRESENTATIVE: MASTER SERGEANT PAUL BAILEY
ENVIRONMENTAL COORDINATOR
7SG/CEU CARSWELL AFB.
FT. WORTH, TEXAS 76127-5000
(817) 782-6258

TUESDAY

11 MAY 93

TERRY LARSEN

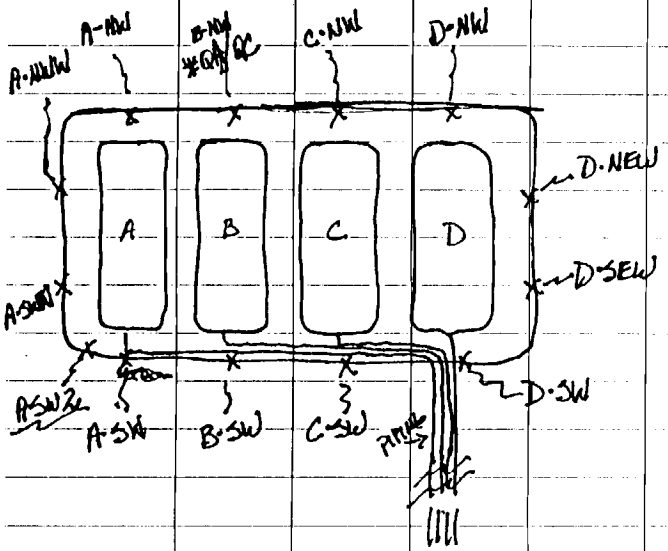
Jay & Terry mobilized to job site late Monday evening 5/10/93.

PWI personnel started removing concrete off the top of tankhold.
They waited approximately 3 hrs. for digging permit.

Started digging after lunch & TANK D (FAR EAST TANK NEXT TO ROAD) floated. So Jay went ahead & pulled tank to keep tank from rolling & leaking residue into tankhold. Groundwater encountered at 6 feet. Hold down straps or cables were rusted and broke due to pressure from ground water giving tanks buoyancy.
Stockpile soil placed on visqueen & site barricaded for the night.

BX BASE STATION - BLDG. # 1518

4 - 11280 gal GAS TANKS



TANK SIZE - 8'X30'

TANKHOLD SIZE - 45'X40'X10'

APPROXIMATELY → 150 C YDS. STOCKPILE

CLOUDY & COOL

JAY HOWARD
TERRY LARSEN
LARRY CUMMINS

WEDNESDAY
12 MAY 93

SAMPLES TAKEN:

1)	TRIP BLANK	2 VOA w/HCl (BTEX)	1500
2)	CAFB-1518-EXW	2 VOA's w/HCl (BTEX)	1600
3)	CAFB-1518-EXW	1 LT AMBER w/HCl (TPH)	1600
4)	CAFB-1518-EXW	250ml PLASTIC (TPH)	
5)	CAFB-1518-EXW	125ML AMBER (TOX)	
6)	CAFB-1518-EXW	1 VOA (PH:TDS)	
7)	CAFB-1518-D-NW/RB	2 VOA's w/HCl	1630
8)	CAFB-1518-D-NW/RB	1 LT AMBER w/HCl	
9)	CAFB-1518-D-NW/RB	250ML PLASTIC	

SOIL SAMPLES - IN PLACE & STOCKPILE

10)	CAFB-1518-A-NW	4 oz	(TPH BTEX LEAD)	17:25
11)	CAFB-1518-A-NWW			17:20
12)	CAFB-1518-A-SWW			17:15
13)	CAFB-1518-A-SW			17:10
14)	CAFB-1518-B-NW			17:30
15)	CAFB-1518-B-SW			17:08
16)	CAFB-1518-C-NW			17:35
17)	CAFB-1518-C-SW			17:05
18)	CAFB-1518-D-NW			16:45
19)	CAFB-1518-D-NEW			16:50
20)	CAFB-1518-D-SEW			16:55
21)	CAFB-1518-D-SW			17:00

22) CAFB·1518·SPA	1 cc	(TPH, BTEX, LEAD)	17:40
23) CAFB·1518·SPB			17:45
24) CAFB·1518·SPC			17:50
25 CAFB·1518·A·SW2			
26) CAFB·1518·B·NW/QC			17:30
27) CAFB·1518·B·NW/QA	½ LITER		17:30

NOTES:

1) Shipped soil samples to Chemtex Labs in San Antonio via Lone Star Overnite. I will hand deliver QA sample to Dallas tomorrow.

2) Told Smith directed PWI to place returned stockpile material back into tankhold, then place 20 MIL liners & backfill with imported backfill material. Also stated that it was not necessary to get compaction test.
TOM KNODE-T&K approved above mentioned directive.

3) I did observe some discoloration on the South end of Tank A so I took sample A·SW2 to see what it might be. It was in an electrical pipe trench. Very dark & black in color.

WEDNESDAY
12 MAY 93

TEDDY JAESEN
LARRY CUNYUS

ARRIVED = 08:30
QUIT = 20:00

Arrived on site -- groundwater is in the tankhold at approx. 6½ TO 7 FEET. Tank D floated yesterday as tank were being removed so they set it on the ground.

TANK C PULLED @ 11:30 — SMALL HOLE IN FIBERGLASS WALL
TANK B " " 13:40
TANK A " " 15:45 — NO HOLES VISIBLE

(ASSO PATCH IN BOTTOM OF TANK W/ SCREWS PROTRUDING OUT - TANK B)

Excavated remaining soil from tanks A, B & C. Stockpiled soil on wisqueen. All tanks floated as they were being removed.
Holder trucking hauled in 216 C. YDS of imported backfill material.
Holder trucking removed 39 C. YDS of concrete

I sampled groundwater in tankhold. Discussed sampling with T&K - TOM ~~KNODE~~ KNODE GOT DIRECTIVE FROM HIM - DEBBIE FITZGERALD - TODD SMITH (CORPS). DIRECTED ME to sample as per contract - to sample groundwater

SUNNY; WARM

TELLEY LARSEN
JAY HOWARD
LARRY CUNYUS

THURSDAY
13 MAY 93

Mobley Co. arrived on site and pumped a total of 100 GALLONS of fluids from all 4 tanks.

Purged all 4 tanks with dry ice. Took appropriate LEL, TOX & O_2 readings.

3-H TANK Co. transported all 4 tanks from site location & issued certificate of destruction.

Capped and abandoned 310 linear feet of fuel piping lines.

Removed 75 linear feet of piping

Backfilled tankfield with unburned stockpile material and placed on 20 MIL - 35' X 40' liner into excavation hole tomorrow

---

* Todd Smith directed PWT to replace curb & gutter lost during tank excavation. PWT also given verbal notice to proceed on modification on contract for Bldg. #1628

* Stuart Pauley came by to make sure we were aware of deviation on modification for Bldg. #1628

FRIDAY
14 MAY 93

WARM

KELLY LARSEN
LARRY CUMMUS

Continue to level stockpile material in tankhold & pack soil under concrete that has been undercut from excavation.

Dirt liner placed in tankhold this pm. before import backfill placed in tankhold.

SATURDAY
15 MAY 93

SUNNY
WARM

JAY HOWARD
TERRY LARSEN

Holder trucking hauled in (216) C. YARDS of imported backfill material. Still backsa dirt & dirt to finish topping off tankhold;

APPENDIX L

Original Lab Results/Chains of Custody

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Date Received: 05/13/93
Time Received: 09:00
Date Sampled: 05/12/93

Client's Job #: D.O.0002/1518
Chain of Custody #: 1376
Report Date: 05/14/93

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Sample Matrix	BTEX Analysis Date	Benzene (PPM)	Toluene (PPM)	Ethylbenzene (PPM)	Xylenes (PPM)	Total BTEX (PPM)
27342	TRAVEL BLANK	Water	05/13/93	<.005	<.005	<.005	<.015	<.03

Approved By: _____

54

Analytical Methods: BTEX in Soil or Water - 8020

159 53

CHEMRON
INCORPORATED

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Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Date Received: 05/13/93
Time Received: 09:00
Date Sampled: 05/12/93

Client's Job #: D.O.0002/1518
Chain of Custody #: 1376
Report Date: 05/14/93

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Sample Matrix	BTEX Analysis Date	Benzene (PPM)	Toluene (PPM)	Ethylbenzene (PPM)	Xylenes (PPM)	Total BTEX (PPM)	TRPH Analysis Date	TRPH (PPM)
27343	CAFB-1518-EXW	Water	05/13/93	.570	3.0	1.8	20.	25.37	05/14/93	14.
27344	CAFB-1518-D-NW/RB	Water	05/13/93	<.005	<.005	<.005	<.005	<0.02	05/14/93	< .5

Approved By: _____

Analytical Methods: BTEX in Soil or Water - 8020; TRPH in Water - 418.1; TRPH in Soil - 9071/418.1

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

159 6J

Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Client's Job #: D.O.0002/151
COC #: 1376
Report Date: 05/17/93

Date & Time Received:
05/13/93, 09:00

Date Sampled:
05/12/93

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Date Analyzed	Total Lead (PPM)
27343	CAFB-1518-EXW	05/14/93	< .1
27344	CAFB-1518-D-NW/RB	05/14/93	< .1

Approved By: _____

Analytical Methods: Solids/Soils - 3050/7420; Water - 3005/7420 or 7421

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

159 69

Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Client's Job #: D.O.0002/151
COC #: 1376
Report Date: 05/17/93

Date & Time Received:
05/13/93, 09:00

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Sample Matrix	Date Analyzed	pH
7343	CAFB-1518-EXW	Water	05/17/93	6.7

Approved By: _____

Analytical Methods: 9040

CHEMRON
INCORPORATED

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159

Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Client's Job #: D.O.0002/151
COC #: 1376
Report Date: 05/18/93

Date & Time Received:
05/13/93, 09:00

Date Sampled:
05/12/93

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Date Analyzed	Total Dissolved Solids (MG/L)
17343	CAFB-1518-EXW	05/17/93	780.

Approved By:

Analytical Method: 160.1

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (210) 340-8121

159 [illegible]

Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Client's Job #: D.O.0002/151
COC #: 1376
Report Date: 05/26/93

Date & Time Received:
05/13/93, 09:00

Date Sampled:
05/12/93

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Sample Matrix	Date Analyzed	TOX (MG/KG)
27343	CAFB-1518-EXW	Water	05/26/93	1.3

Approved By: _____

Analytical Method: 9020

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Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Client's Job #: D.O.0002/1518
Chain of Custody #: 1376
Report Date: 05/26/93

QUALITY ASSURANCE REPORT

Description / Parameter	Matrix	Analysis Date	Spike Concentration	Analyzed Value	Background Value	% Recovery	Control Limits Lower	Control Limits Upper	Relative % Difference	Control Limit
MS - Benzene	Water	05/13/93	20	23	< 5	109%	75%	125%		
MS - Toluene	Water	05/13/93	20	25	5	100%	75%	125%		
MS - Ethylbenzene	Water	05/13/93	20	22	< 5	110%	75%	125%		
MS - Xylenes	Water	05/13/93	60	67	< 5	109%	75%	125%		
MSD - Benzene	Water	05/13/93				110%			0%	< 30%
MSD - Toluene	Water	05/13/93				104%			4%	< 30%
MSD - Ethylbenzene	Water	05/13/93				110%			0%	< 30%
MSD - Xylenes	Water	05/13/93				105%			5%	< 30%
MS - TRPH	Water	05/14/93	3.87	3.29	< .5	85%	75%	125%		

Concentration Units: Soil / Sediments - mg/kg and Water - ug/L

60

156 72

COC #: 1370

CHEMRON INCORPORATED

431 Isom Rd., Suite 135 San Antonio, TX 78216
(512) 340-8121 (800) 572-6955

ORIGINAL
CHAIN OF CUSTODY

CHAIN OF CUSTODY RECORD

Project Manager: Perry Williams, Inc.	Phone #: (806) 373-5820
Address: 2700 S. Wilson - Amarillo, Tx. 79103	FAX #: (806) 371-0340
Project Number: D.O. # 0002	Project Name: CARSWELL AFB
Project Location: BLDG. #1518	Sampler Signature: [signature]

ID # LAB USE ONLY	Sampling Date	Sampling Time	Matrix [s,w,f]	Composite	Grab	Boring	FIELD ID #	FIELD DESCRIPTION	No. of Containers	BTEX	TRPH	LEAD	TOX	TDS; pH	~~[illegible]~~	REMARKS (Preservation, Size/Amount, Etc.)
27342	5/12/93	1500	W		✓			TRAVEL BLANK	2	✓						2 VOA'S w/ HCl
27343	↓	1600	W		✓			CAFB·1518·EXW	2	✓						1. VOA'S w/HCl
27343	↓	↓	↓		↓			CAFB·1518·EXW	1		✓					1 LITER AMBER w/HCl
27343	↓	↓	↓		↓			CAFB·1518·EXW	↓			✓				250 ML PLASTIC
27343	↓	↓	↓		↓			CAFB·1518·EXW	↓				✓			125 ML AMBER
27343	↓	↓	↓		↓			CAFB·1518·EXW	↓					✓		1 VOA
27344	↓	1630	↓	✓				CAFB·1518·D·NW/RB	2	✓						2 VOA'S w/HCl
27344	↓	↓	↓	↓				CAFB·1518·D·NW/RB	1		✓					1 LITER AMBER w/HCl
27344	↓	↓	↓	↓				CAFB·1518·D·NW/RB	1			✓				250ML PLASTIC

Relinquished by: [Signature]	Date	Time	Received by: [Signature]
[signature]	5/12/93	19:00	
	5/13/93	0900	[signature]
			Received for Laboratory by: Signature

Remarks:

	Yes	No	
Headspace		✓	If Yes, Amt.
Properly Sealed	✓		If No, Explain
Chilled to 40°F	✓		If No, Temp.

Type of Container

Additional comments:

15973

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

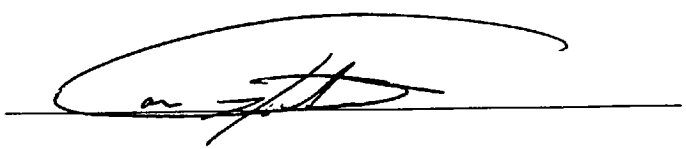
Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Date Received: 05/13/93
Time Received: 09:00
Date Sampled: 05/12/93

Client's Job #: D.O.0002/1518
Chain of Custody #: 1377
Report Date: 05/17/93

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Sample Matrix	BTEX Analysis Date	Benzene (PPM)	Toluene (PPM)	Ethylbenzene (PPM)	Xylenes (PPM)	Total BTEX (PPM)	TRPH Analysis Date	TRPH (PPM)
27345	CAFB-1518-A-NW	Soil	05/13/93	< .4	< .4	< .4	< 1.2	<2.4	05/13/93	< 10.
27346	CAFB-1518-A-NWW	Soil	05/13/93	< .4	< .4	< .4	< 1.2	<2.4	05/13/93	< 10.
27347	CAFB-1518-A-SWW	Soil	05/13/93	< .4	< .4	< .4	< 1.2	<2.4	05/13/93	< 10.
27348	CAFB-1518-A-SW	Soil	05/13/93	< .4	< .4	< .4	< 1.2	<2.4	05/14/93	64.
27349	CAFB-1518-B-NW	Soil	05/14/93	< .4	3.8	19.	90.	112.8	05/14/93	66.
27350	CAFB-1518-B-SW	Soil	05/14/93	< .4	< .4	.5	19.	19.5	05/14/93	200.
27351	CAFB-1518-C-NW	Soil	05/14/93	7.1	92.	44.	220.	363.1	05/14/93	44.
27352	CAFB-1518-C-SW	Soil	05/14/93	< .4	< .4	< .4	64.	64.0	05/14/93	63.
27353	CAFB-1518-D-NW	Soil	05/14/93	< .4	< .4	< .4	1.5	1.5	05/14/93	28.
27354	CAFB-1518-D-NEW	Soil	05/14/93	11.	110.	40.4	250.	411.4	05/14/93	19.

Approved By: 

Analytical Methods: BTEX in Soil or Water - 8020; TRPH in Water - 418.1; TRPH in Soil - 9071/418.1

CHEMRON
INCORPORATED

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159 73

Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Client's Job #: D.O.0002/151
COC #: 1377
Report Date: 05/17/93

Date & Time Received:
05/13/93, 09:00

Date Sampled:
05/12/93

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Date Analyzed	Total Lead (PPM)
7345	CAFB-1518-A-NW	05/14/93	10.
7346	CAFB-1518-A-NWW	05/14/93	10.
7347	CAFB-1518-A-SWW	05/14/93	11.
7348	CAFB-1518-A-SW	05/14/93	< 5.0
7349	CAFB-1518-B-NW	05/14/93	5.2
7350	CAFB-1518-B-SW	05/14/93	15.
7351	CAFB-1518-C-NW	05/14/93	< 5.1
7352	CAFB-1518-C-SW	05/14/93	< 5.3
7353	CAFB-1518-D-NW	05/14/93	< 5.1
7354	CAFB-1518-D-NEW	05/14/93	< 5.1

Approved By: 

Analytical Methods: Solids/Soils - 3050/7420; Water - 3005/7420 or 7421

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Date Received: 05/13/93
Time Received: 09:00
Date Sampled: 05/12/93

Client's Job #: D.O.0002/1518
Chain of Custody #: 1378
Report Date: 05/17/93

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Sample Matrix	BTEX Analysis Date	Benzene (PPM)	Toluene (PPM)	Ethylbenzene (PPM)	Xylenes (PPM)	Total BTEX (PPM)	TRPH Analysis Date	TRPH (PPM)
27355	CAFB-1518-D-SEW	Soil	05/14/93	14.	94.	51.	960.	1119	05/14/93	630.
27356	CAFB-1518-D-SW	Soil	05/14/93	< .4	< .4	< .4	< 1.2	<2.4	05/14/93	< 10.
27357	CAFB-1518-SPA	Soil	05/14/93	< .4	.7	.9	33.	34.6	05/14/93	47.
27358	CAFB-1518-SPB	Soil	05/14/93	< .4	.5	.5	17.	18.0	05/14/93	18.
27359	CAFB-1518-SPC	Soil	05/14/93	< .4	1.2	1.0	16.	18.2	05/14/93	31.
27360	CAFB-1518-B-NW/QC	Soil	05/14/93	< .4	3.2	16.	80.	99.2	05/14/93	41.
27361	CAFB-1518-A-SW2	Soil	05/14/93	< .4	< .4	< .4	3.5	3.5	05/14/93	< 10.

Approved By: _____

Analytical Methods: BTEX in Soil or Water - 8020; TRPH in Water - 418.1; TRPH in Soil - 9071/418.1

CHEMRON
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Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Client's Job #: D.O.0002/151
COC #: 1378
Report Date: 05/17/93

Date & Time Received:
05/13/93, 09:00

Date Sampled:
05/12/93

CHEMICAL ANALYSIS REPORT

hemron #	Sample Description	Date Analyzed	Total Lead (PPM)
7355	CAFB-1518-D-SEW	05/14/93	< 5.5
7356	CAFB-1518-D-SW	05/14/93	< 5.5
7357	CAFB-1518-SPA	05/14/93	11.
7358	CAFB-1518-SPB	05/14/93	5.1
7359	CAFB-1518-SPC	05/14/93	5.0
7360	CAFB-1518-B-NW/QC	05/14/93	5.5
7361	CAFB-1518-A-SW2	05/14/93	5.5

pproved By: _____

Analytical Methods: Solids/Soils - 3050/7420; Water - 3005/7420 or 7421

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Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Client's Job #: 0.0.0002/1518
Chain of Custody #: 1378
Report Date: 05/26/93

QUALITY ASSURANCE REPORT

Description / Parameter	Matrix	Analysis Date	Spike Concentration	Analyzed Value	Background Value	% Recovery	Control Limits Lower	Control Limits Upper	Relative % Difference	Control Limit
MS - Benzene	Soil	05/14/93	8.3	6.5	< .4	78%	75%	125%		
MS - Toluene	Soil	05/14/93	8.3	6.8	< .4	82%	75%	125%		
MS - Ethylbenzene	Soil	05/14/93	8.3	6.6	< .4	79%	75%	125%		
MS - Xylenes	Soil	05/14/93	25	20.075	< 1.2	80%	75%	125%		
MSD - Benzene	Soil	05/14/93				71%			9%	< 30%
MSD - Toluene	Soil	05/14/93				77%			6%	< 30%
MSD - Ethylbenzene	Soil	05/14/93				76%			4%	< 30%
MSD - Xylenes	Soil	05/14/93				77%			4%	< 30%
MS - TRPH	Soil	05/14/93	439	463	64	90.9	75%	125%		
MSD - TRPH	Soil	05/14/93				101.			10%	< 30%
MS - Lead	Soil	05/14/93	101.5	116.7	< 5.2	115%	75%	125%		
MSD - Lead	Soil	05/14/93				100%			13.9	< 30%
MS - Lead	Soil	05/14/93	104.2	104.2	< 5.1	100%	75%	125%		
MSD - Lead	Soil	05/14/93				100%			0%	< 30%
MS - Lead	Soil	05/14/93	105.8	100.5	5.5	89%	75%	125%		
MSD - Lead	Soil	05/14/93				85%			4.6%	< 30%

Concentration Units: Soil / Sediments - mg/kg and Water - ug/L

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Client: Perry Williams, Inc.
P. O. Box 30206
Amarillo, TX 79120

Client's Job #: D.O.0002/1518
Chain of Custody #: 1377
Report Date: 05/26/93

QUALITY ASSURANCE REPORT

Description / Parameter	Matrix	Analysis Date	Spike Concentration	Analyzed Value	Background Value	% Recovery	Control Limits Lower	Control Limits Upper	Relative % Difference	Control Limit
MS - Benzene	Soil	05/13/93	8.3	6.6	< .4	79%	75%	125%		
MS - Toluene	Soil	05/13/93	8.3	6.7	< .4	80%	75%	125%		
MS - Ethylbenzene	Soil	05/13/93	8.3	6.5	< .4	78%	75%	125%		
MS - Xylenes	Soil	05/13/93	25	19.82	< 1.2	79%	75%	125%		
MSD - Benzene	Soil	05/13/93				78%			1%	< 30%
MSD - Toluene	Soil	05/13/93				79%			1%	< 30%
MSD - Ethylbenzene	Soil	05/13/93				77%			1%	< 30%
MSD - Xylenes	Soil	05/13/93				79%			0%	< 30%
MS - Benzene	Soil	05/13/93	8.3	6.4	< .4	77%	75%	125%		
MS - Toluene	Soil	05/13/93	8.3	6.6	< .4	79%	75%	125%		
MS - Ethylbenzene	Soil	05/13/93	8.3	6.4	< .4	77%	75%	125%		
MS - Xylenes	Soil	05/13/93	25	19.62	< 1.2	78%	75%	125%		
MSD - Benzene	Soil	05/13/93				78%			1%	< 30%
MSD - Toluene	Soil	05/13/93				82%			4%	< 30%
MS - Ethylbenzene	Soil	05/13/93				79%			3%	< 30%
MSD - Xylenes	Soil	05/13/93				80%			3%	< 30%
MS - TRPH	Soil	05/13/93	387	343	< 10	88.6	75%	125%		
MSD - TRPH	Soil	05/13/93				93%			5%	< 30%
MS - Lead	Soil	05/14/93	101.5	116.7	< 5.2	115%	75%	125%		
MSD - Lead	Soil	05/14/93				100%			13.9	< 30%
MS - Lead	Soil	05/14/93	104.2	104.2	< 5.1	100%	75%	125%		
MSD - Lead	Soil	05/14/93				100%			0%	< 30%
MS - Lead	Soil	05/14/93	105.8	100.5	5.5	89%	75%	125%		
MSD - Lead	Soil	05/14/93				85%			4.6%	< 30%

Concentration Units: Soil / Sediments - mg/kg and Water - ug/L

COC #: 1577

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(512) 340-8121 (800) 572-6955

ORIGINAL
CHAIN OF CUSTODY

CHAIN OF CUSTODY RECORD

Project Manager: Perry Williams, Inc.	Phone #: (806) 373-5820
Address: 2700 S. Wilson - Amarillo, Tx. 79103	FAX #: (806) 371-0340
Project Number: DO #0002	Project Name: CARSWELL AFB
Project Location: BLD6 # 1518	Sampler Signature: Harry Cumpton

ID # LAB USE ONLY	Sampling Date	Sampling Time	Matrix [s,w,f]	Composite	Grab	Boring	FIELD ID #	FIELD DESCRIPTION	No. of Containers	ANALYSIS: BTEX	TRPH	Lead				REMARKS (Preservation, Size/Amount, Etc.)	
27345	5/12/93	17:25	S		✓			CAFB·1518·A·NW	1	✓	✓	✓				*	72 HR, 9oz
27346		17:20			✓			CAFB·1518·A·[redacted]NWW								*	
27347		17:15			✓			CAFB·1518·A·[redacted]SWW								*	
27348		17:10			✓			CAFB·1518·A·SW								*	
27349		17:30		✓				CAFB·1518·B·NW								*	
27350		17:08			✓			CAFB·1518·B·SW								*	
27351		17:35			✓			CAFB·1518·C·NW								*	
27352		17:05			✓			CAFB·1518·C·SW								*	
27353		16:45			✓			CAFB·1518·D·NW								*	
27354		16:50			✓			CAFB·1518·D·NEW								*	

Relinquished by: [Signature]	Date	Time	Received by: [Signature]
Harry Cumpton	5/12/93	19:00	
Relinquished by: [Signature]	Date	Time	Received by: [Signature]
	5/13/93	0900	
Relinquished by: [Signature]	Date	Time	Received by: [Signature]
Relinquished by: [Signature]	Date	Time	Received by: [Signature]
Relinquished by: [Signature]	Date	Time	Received for Laboratory by: Signature

Remarks:

	Yes	No
Headspace		✓
Properly Sealed	✓	
Chilled to 40°F	✓	

If Yes, Amt. _____
If No, Explain _____
If No, Temp. _____

Type of Container _____

Additional comments: * 72 HR.

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COC #. [illegible]8

CHEMRON INCORPORATED

431 Isom Rd., Suite 135 San Antonio, TX 78216
(512) 340-8121 (800) 572-6955

ORIGINAL CHAIN OF CUSTODY

CHAIN OF CUSTODY RECORD

Project Manager: Perry Williams, Inc.	Phone #: (806) 373-5820
Address: 2700 S. Wilson, Amarillo, Tx. 79103	FAX #: (806) 371-0340
Project Number: DO # 0002	Project Name: CARSWELL AFB
Project Location: BLDG # 1518	Sampler Signature: Terry Cunyus

ID # LAB USE ONLY	Sampling Date	Sampling Time	Matrix [s,w,f]	Composite	Grab	Boring	FIELD ID #	FIELD DESCRIPTION	No. of Containers	BTEX	TRPH	LEAD					REMARKS (Preservation, Size/Amount, Etc.)
27355	5/12/93	16:55	S		✓			CAFB·1518·[illegible]D·SW1	1	✓	✓	✓				*	72 HR. 4oz
27356		17:00			✓			CAFB·1518·D·SW								*	
27357		17:40		✓				CAFB·1518·SPA								*	
27358		17:45						CAFB·1518·SPB								*	
27359		17:50		✓				CAFB·1518·SPC								*	
27360		17:30		✓				CAFB·1518·B·NW/QC								*	
27361		17:12	S					CAFB·1518·A·SW2 *		✓	✓	✓					

Relinquished by: [Signature]	Date	Time	Received by: [Signature]
Terry Cunyus	5/12/93	19:00	
Relinquished by: [Signature]	5/13/93	0900	Received by: [Signature] [illegible]
Relinquished by: [Signature]			Received by: [Signature]
Relinquished by: [Signature]			Received by: [Signature]
Relinquished by: [Signature]			Received for Laboratory by: Signature

Remarks:

	Yes	No	
Headspace		✓	If Yes, Amt. ______
Properly Sealed	✓		If No, Explain ______
Chilled to 40°F	✓		If No, Temp. ______

Type of Container ______

Additional comments: * 72 HR

* Added to COC per telecon with L.C. [illegible]

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APPENDIX M

Soil Compaction Tests

SWL SOUTHWESTERN LABORATORIES

2200 Gravel Drive • Fort Worth, Texas 76118-7123
(817) 284-7755 • FAX (817) 589-1420

159 63

REPORT OF MOISTURE-DENSITY RELATIONS

CLIENT: Perry Williams, Inc.
Attention: Matt Montgomery
Post Office Box 30206
Amarillo, TX 79120

PROJECT: C A F B
HOLDER TRUCKING

CLIENT NO.: 5943170
REPORT NO.: 302585
DATE OF SERVICE: 5/11/93
AUTHORIZATION:
REPORT DATE: 5/17/93

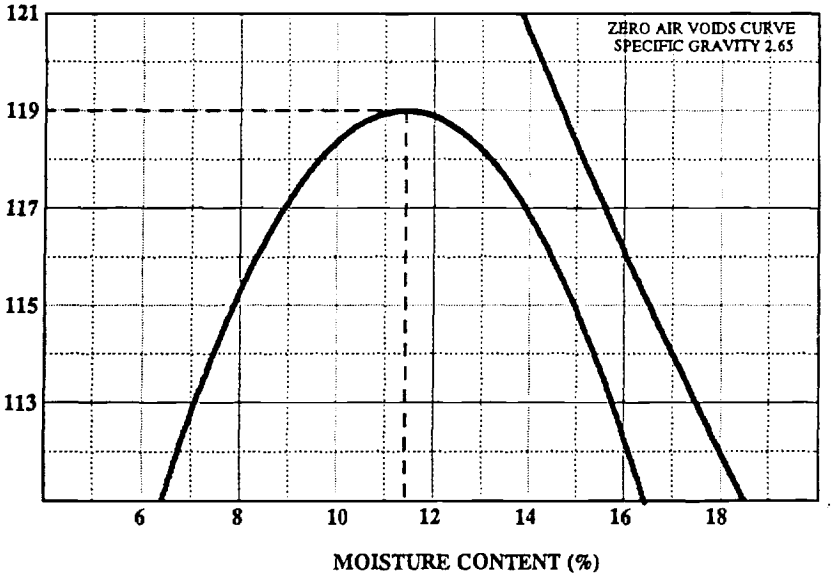
SERVICES: Prepare samples delivered to laboratory and perform moisture-density relations test to establish maximum density and optimum moisture of the material.

PROJECT DATA

CONTRACTOR: Perry Williams, Inc.
TEST FOR: Select Fill
MATERIAL: Light Brown Sandy Clay
METHOD OF TEST: ASTM D698, Method A

DATE SAMPLED: 5/11/93
SAMPLED BY: CME Division
SAMPLE LOCATION: Received in laboratory.

REPORT OF TESTS



MAXIMUM DENSITY, PCF: 119.0

OPTIMUM MOISTURE (%): 11.4

LIQUID LIMIT: 27

PLASTIC LIMIT: 16

PLASTICITY INDEX: 11

Technician: Claude J. Slone, SET
Field Supervisor

Report Distribution:
(2) Perry Williams, Inc.

Southwestern Laboratories, Inc.

Kemp E. Akeman, P.E.
Operations Manager

1006 AMP

SWL SOUTHWESTERN LABORATORIES

2200 Gravel Drive • Fort Worth, Texas 76118-7123
(817) 284-7755 • FAX (817) 589-1420

159 34

REPORT OF MOISTURE-DENSITY RELATIONS

CLIENT: Perry Williams, Inc.
Attention: Matt Montgomery
Post Office Box 30206
Amarillo, TX 79120

PROJECT: C A F B
HOLDER TRUCKING

CLIENT NO.: 5943170
REPORT NO.: 302585
DATE OF SERVICE: 5/11/93
AUTHORIZATION:
REPORT DATE: 5/17/93

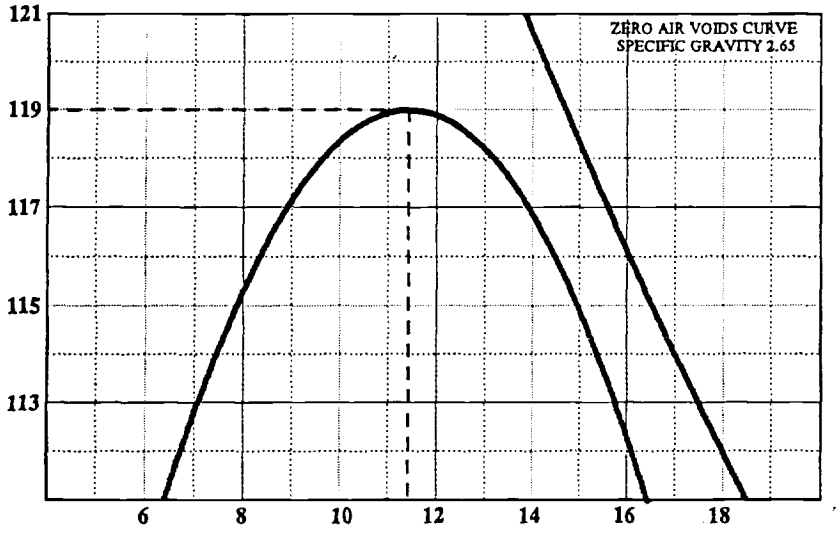
SERVICES: Prepare samples delivered to laboratory and perform moisture-density relations test to establish maximum density and optimum moisture of the material.

PROJECT DATA

CONTRACTOR: Perry Williams, Inc.
TEST FOR: Select Fill
MATERIAL: Light Brown Sandy Clay
METHOD OF TEST: ASTM D698, Method A

DATE SAMPLED: 5/11/93
SAMPLED BY: CME Division
SAMPLE LOCATION: Received in laboratory.

REPORT OF TESTS



MAXIMUM DENSITY, PCF: 119.0

OPTIMUM MOISTURE (%): 11.4

LIQUID LIMIT: 27

PLASTIC LIMIT: 16

PLASTICITY INDEX: 11

Technician: Claude J. Slone, SET
Field Supervisor

Report Distribution:
(2) Perry Williams, Inc.

Southwestern Laboratories, Inc.

Kemp E. Akeman, P.E.
Operations Manager

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FINAL PAGE

ADMINISTRATIVE RECORD

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